



South to consider this feeling, even though its absolute justice may be questioned, and to ask if it would not be better for the South to lose temporarily in weight of numbers in Congress than to continue to be cut off from States naturally, geographically and economically belonging to it, and to find its only allies in thinly-settled rotten borough mountain States, to be harassed almost constantly by agitation of the negro problem magnified by men who gain office or retain office thereby, to have the social and industrial fabric threatened from the outside by demagogues who heap fuel upon the dying fires of passion among their constituents by attempted force bills and other sectional measures, and to suffer the stagnation not limited to politics of being obliged by local machines, strong in the absence of healthy opposition, to follow party organization in national or local elections without regard to conviction and without regard to any excesses to which the party may be committed?

Will not the South by laying aside a weapon, inequality of representation according to the voting strength and becoming more and more useless except in the hands of politicians, really spike the guns of the forces it dreads, not without cause, and hasten the day for an equalization of representation in the whole country as healthy white immigration takes the place in the South of the only negroes which menace the peace and prosperity of that section, the negroes who, finding their occupation in politics gone in the South, will migrate to States beyond its borders, there to give occasion for State provision against the negro in politics?

Will not the South be benefited, morally and materially, in the long run by dealing with the negro question upon a basis of unquestionable honesty, regardless of immediate consequences?

Will anybody except politicians, North or South, object to disfranchisement of the negro upon such a basis?

Is it not time for the negro question to become one of statesmanship instead of one of politics?

#### Trusts Outside Politics.

Using the word trust in its popular sense, and in the sense which has given rise to much misapprehension and loose or perverted thought, the suggestion obtrudes itself that the close of the campaign in which the trust was pushed to the front as an issue permits, perhaps, a consideration of it from the purely economic point of view. A starting-point may be had in a practical article in the current number of *The Forum* by George E. Roberts, director of the United States Mint, who asks, "Can There Be a Good Trust?" He takes as his text the admission of Senator James K. Jones of Arkansas that he owns stock in a company organized to develop the roundlap-bale cotton press, his explanation that the company's \$7,000,000 capital is demanded by the business it proposes to do, and that the dividend on this capitalization will come neither from cotton producers nor cotton consumers, but will be met by a part of the savings effected by the new process, and his claim that by compressing the cotton into smaller space and by preserving it from waste a saving of from \$3 to \$4 a bale is achieved. Mr. Roberts says:

If this is true it is evidently possible that ample dividends may be paid on the stock of his company after conferring benefits upon the public sufficient to induce it to discard the old method and use the new. The facts being as Senator Jones states them, it

is difficult to discover any flaw in his defense. But his reasoning disposes of complaints against a great many individuals other than himself, and of hostility to a great many big corporations beside his own. It refutes some popular theories concerning the accumulation of large fortunes. It assumes that a corporation is not to be condemned because it has large capital or because it destroys the established business and renders valueless the plants of numerous small competitors, or because it dispenses with some of the labor previously employed.

It has been said a great many times that nobody can make a million dollars honestly. The possession of such a fortune is considered by a great many people to be prima facie and conclusive evidence that the possessor has obtained it without earning it, without giving an equivalent for it. This theory has some light shed on it by Senator Jones' statement that the new process for baling cotton will save from \$3 to \$4 per bale. The cotton crop of the United States is about 10,000,000 bales, and it follows that the possible saving accomplished by this invention in ten years will not be less than \$300,000,000. The inventor and all who aided him may become millionaires many times over out of wealth heretofore lost, and yet be large benefactors of society. The service of the invention will go on indefinitely until some superior process, to which it will probably lead, will have supplanted it, creating another set of fortunes in doing so.

Mr. Roberts scans the field of invention of machines, such as that of Mergenthaler, or of methods, such as those of Andrew Carnegie, to prove that human society is not oppressed thereby, but is actually benefited, inasmuch as the problem of society is how to increase production, and that it is to the advantage of everybody to have the efficiency of labor promoted and the available stock of wealth increased, because whatever is thereby saved begins immediately to contribute to the total output. He contends that the masses cannot be prevented from sharing in the advantages of increasing wealth and the gains of industrial progress, and while recognizing that there is something disquieting in recent economic developments, and that there is reason for action of some kind, he says:

What is done should be done in harmony with the economic laws which are evidently forcing the centralization of industry, and with a view to promoting, and not of defeating, the legitimate result of that movement, which is an increased production and a more general distribution of the material comforts of life.

This is but a brief outline of an article which presents in popular form certain elemental truths which cannot be lost sight of if the world's industry is to develop for the good of all. The writer could hardly have chosen a better example of the tendencies of today than the development of the roundbale system. It is a working illustration of the advantages of a large aggregation of capital accomplishing in its widespread operations what could not be done by half a dozen or more smaller groups of capital, working more than likely at cross purposes, of economies affected by invention and of the benefits conferred upon investors, upon growers and upon users of cotton. It does its work of adding to the total wealth not by producing more material, but by saving material from waste and damage, and by reducing the drains of middlemen becoming economically unnecessary.

Two carloads of brushes were recently shipped from Baltimore to Chicago and Minneapolis by a firm of local brush manufacturers. The carloads were portions of an order for 385,000, valued at \$60,000. Seven cars will be required to transport all of the order.

A dispatch from *Newport News* says that the Tredegar Iron Co. of Richmond is shipping 900 kegs of mule shoes for the British government.

#### What Is the Matter with Tennessee?

##### *Editor Manufacturers' Record:*

I shall attempt to answer plainly and concisely the question propounded in the clipping sent me in your letter of recent date, "What is the matter with Tennessee?" Before answering this inquiry, let us determine how Tennessee stands relatively with other Southern States. While in population it ranks fourth, Texas, Georgia and Kentucky surpassing it, yet in many other respects we find that its position is one of proud pre-eminence.

Tennessee takes the first rank among Southern States in the production of Irish potatoes, rough marble and hardwood lumber and other hardwood material, such as staves, spokes, handles, etc. Among the Southern States it has the largest number of high schools and colleges, and shows the largest percentage of its population enrolled in the public schools, and though fourth in population, it is second in the average daily attendance at schools. It takes first rank in the amenity and healthfulness of its climate and the versatility of its soils and productions.

Tennessee takes the second rank among the Southern States in the production of corn, wheat and oats, and in the number of mules, and second in the production of pig-iron until the last year, when it fell to the third place. It has within the past three years surpassed all the States, except Florida, in the production of phosphate rock, and is now pressing that State for supremacy in that respect. It has fewer mortgages on farms than any other State in the Union in proportion to the number of farms. Though only fifth in the number of its cotton mills, it is second in the South in the number of woolen mills and first in number and capacity of flouring mills. In the production of hay and in the number and value of its horses it stands third. It is second in the production of poultry, and takes the third place in the number and value of swine and in the value of eggs, and third in the production of milk and butter. Though only fifth in the output of coal, it takes the second place in the production of iron ores. While it stands only fourth in the production of tobacco, it has the largest inland market for the sale of heavy shipping tobacco in the world, with one exception, and at Memphis the largest inland cotton market in the United States.

As to the growth of its population, Tennessee shows a fair average with all those States having no great centers of population. While the increase in population for the past decade amounted to only 14.4 per cent., we find that Ohio increased only 13.2 per cent.; Indiana, 14.7 per cent.; Maryland, 14.1 per cent.; Virginia, 12 per cent.; Nebraska, 1 per cent.; Kansas less than 3 per cent.; New Hampshire, 9.3 per cent.; Vermont, 3 per cent., while Texas made the enormous increase of 36.3 per cent., which was primarily due to the low rates of transportation given immigrants to that State. Louisiana showed a gain of 23.5 per cent., which may be credited to the successful efforts to make New Orleans a great shipping point for Western produce and to Italian immigration. The manufacturing centers of the South, with the exceptions named, made the largest gains in population. North and South Carolina increased their population by 17 per cent., Georgia and Alabama by 21 per cent. West Virginia gained nearly 26 per cent., due doubtless to the rapid growth of its coal-mining interests.

While Tennessee in proportion to population is more than an average of the South in the value of its productions, yet, with its almost infinite variety of resources, mineral, forest and agricultural, it should have moved forward with more rapidity than any other Southern State. What are the causes of this slow progress?

First, there has been in Tennessee for many years a popular prejudice against all corporations. This prejudice has not been confined to quasi-public corporations, such as railroads, street-car lines, etc., but has manifested itself also against those industrial establishments organized under corporate powers. Such prejudices produce a withering paralysis in all those corporate institutions that give constant employment to labor, furnish markets for agricultural products, increase the prices of land in their vicinity and are the initiative of better schools and better roads, better farming and a larger and more lucrative commerce.

I believe that the public men of Tennessee are beginning to awake to the necessity of some action for the encouragement of manufacturing enterprises. Heretofore we have had too much politics. The public mind has been engrossed more in the discussion of impractical schemes concerning the money of the country or for the abandonment of what the valor of our soldiers have won than in the discussion of those questions that concern their own material prosperity. There is now, however, springing up a healthful sentiment in relation to the necessity of giving all possible encouragement to the building up of manufactures in the State. The bad odor, however, of the past unwise legislation, which sought to put onerous burdens on all corporations simply because they were corporations, still clings to the State, and capitalists have not had their confidence fully restored. This uneasiness on the part of capitalists could be overcome by the passage of a law covering less than two lines in length, to wit:

"As corporations are artificial persons created by law, they must be taxed as individuals."

The large number of pages in our statutory laws devoted to the taxing of corporations looks suspicious to the investor. No other Southern State has been so rigid in its requirements concerning the assessment of the property of corporations. The present laws should be repealed, and corporations should be placed on the same footing as an individual. Such a law would effect more good than a constitutional provision exempting corporations from taxation for a given number of years, because it would mean the fairest treatment by the lawmakers and juries.

Another highly beneficial result would come from the enactment of such a law. It would open to the poor a wide door for bettering their condition by holding out boundless opportunities for small investments. In this age of large capital the poorer classes can only be protected by a combination of their small earnings, which in the aggregate will rival or surpass the greatest fortunes. A man with large capital would then have no advantage over the aggregated savings of a great number of poorer people operating under corporate powers. A capitalist with a million of dollars may build a large cotton mill and be taxed only as an individual. But if 1000 poor men put in \$1000 each and build a cotton mill by its side in every respect its duplicate, the probabilities have been, until recently, that the stockholders would be vexed and unjustly treated by the lawmaking power, simply because their plant was operated under corporate powers. This fear, even among local capitalists, has retarded growth in manufacturing industry. The legislature, the courts and the jury should look with the greatest kindness upon every effort to build up new industries by the combina-

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tion of small capitalists, and thus give employment to themselves. Such industries as are potent factors of prosperity should be encouraged by the most liberal legislation.

Another reason why Tennessee has not moved more rapidly to the front is due, I regret to say, in part at least, to the action of Tennessee railroads. For fifty years Tennessee has been a great beehive from which have gone out swarms of people to build up other States. Texas and Arkansas, as well as California, were largely settled up by Tennesseans. Until quite recently very low rates have been granted by our railroads to all emigrants moving from this State to Texas and other States West, while no reduced rates were given to those who desired to return or to immigrants coming in from other States. It was a difficult matter to get back from Texas, but it was easy to get there.

To a large extent this condition is true now. While the rates to Texas have been advanced, no reduced rates to immigrants coming from the North are given except upon special application. There are no half-rates nor second-class fares or cars. Though immigrants in large bodies are carried from New York to Minnesota and the Dakotas for about \$5 each, it takes about \$18 each to move a like body of immigrants from New York to Tennessee. The only reduced rates from the North are on the sale of what are known as homeseekers' tickets, which are round-trip tickets sold at about one fare two days in the month and good for twenty days. But should such prospectors, after investigation, feel inclined to move to Tennessee after returning home, they are required to pay full fare for themselves and families to Ohio river points, from which places settlers' rates may be secured.

One reason that operates against im-

migration to the South generally is the lack of good roads and good school facil-

ties in the country. One of the wisest things that the legislature of Tennessee could do would be to enact a good road law, something like that now in operation in New Jersey, and support it by a liberal tax.

The tax for public schools should also be increased, so that the schools of the country may be kept in operation at least eight months in the year. Taxes are not so objectionable to immigrants or to capitalists as the want of good roads and the lack of good schools in the country. Yet, notwithstanding these drawbacks, Tennessee is getting a fair proportion of immigration, because of its happy climate and cheap but generous soils. Every year shows more inquiry for literature describing the lands and crops and markets of the State. A better class of immigrants are now coming to the State. Most of them are able to buy good farms or have means enough to enter some profitable calling. The fact is, Tennessee has so many different resources that a small advance in the development of each of them makes a large aggregate. Many States in the South are bending their energies in the direction of cotton manufacturing. Tennessee has a dozen industries, such as phosphates, fertilizer works, marbles, coal, iron, lumber, etc., which, when collected together, make a showing about equal to that of any other Southern State when the comparative population and size of the different States are considered.

Viewing the whole situation, therefore, I cannot say there is much the matter with Tennessee. It is a live, progressive State. It has probably given too much time to politics and too little attention to business. If the State has made such progress under such depressing influences

and conditions, how great must that progress be when our people devote their time, attention, energies, business capacity and capital to the development of its great and varied resources?

J. B. KILLEBREW.

#### AMERICAN MACHINERY ABROAD.

##### Observations of Mr. Thos. P. Egan at the Paris Exposition.

In discussing for the Manufacturers' Record American machinery from the standpoint of the Paris Exposition Mr. Thomas P. Egan, president of the J. A. Fay & Egan Co., manufacturer of wood-working machinery, of Cincinnati, Ohio, says:

"The great World's Fair at Paris has just closed, and the immensity and variety of the 'Exposition Universelle' can only be realized by careful study. I had been at the exposition nearly four months, and had only begun to see it, when I had to leave on other business. Some engineers and visitors, I am aware, saw the exposition in three days, some in one week, and then wrote back it was a failure.

"One day at the exposition I met a Chicago newspaper man and engineer, and he said to me: 'Well, this show falls far short of the World's Fair.' I asked him: 'How long have you been here?' and he said 'three weeks.' 'Well,' I said, 'let us take a walk through; at Chicago you had from five to ten Corliss engines—now look; here are over a hundred, much larger, of finer finish and far in advance of Chicago; also this same percentage could be kept up on woodworking machinery, machinists' tools, motors, dynamos, cotton, woolen and silk-weaving machinery; in fact, for those who saw the World's Fair at Chicago, for Paris multiply ten times, and you will begin to get a faint idea of the priceless treasures spread out there.'

"My Chicago friend thanked me, and said I had given him a much better idea of the truth at Paris. The truth was you saw more and walked less; it was more compact.

"To appreciate to the fullest extent the great Paris Exposition of 1900 you should stay there, study it and its details carefully; the more you do this the greater will be your appreciation of its immensity. Machinery and mechanics interested me greatly, and of the powerful, immense and ponderous machines shown by the nations of the earth, sometimes the smaller countries made by far the best exhibit. Little Switzerland had engines there that were marvels in their power, finish and beauty, and Belgium also was represented to a greater extent than larger countries. There was a crane from Berlin. It was built of angle steel and trussed and arched on a new plan. To look at its sheet-iron-looking frame you would scarce think it could support itself, yet one man could manipulate it either vertically or horizontally, and move heavy masses close to hundreds of tons in weight with as much speed as you can move your fork. There was liquid air distributed in bucketfuls—air frozen 350 degrees below zero and produced at a pressure of 2500 pounds.

"The Eiffel Tower is still a great attraction, with new elevators carrying its passengers up 1000 feet, showing them the country for a radius of twenty-five miles.

"The exposition proper is composed of the Champ de Mars, and one mile from this, but connected by a strip along the river, the Invalides. These two sections are also connected by an electric railroad and a moving sidewalk. If you are in a hurry you take the railroad, and it is a fast ride; but if not so hurried you

go up to about the third story of a house and step on the moving sidewalk and you take a trip through the heart of Paris, rows of dwellings on each side, across streets and avenues. It is a great treat, and you can get off at just the section you desire. The bridge over the Seine, called 'Pont Alexandre,' is one of the most beautiful in the world, and its four towers great works of art.

"The Seine is more used for business and travel than any other river I ever saw. In the summer it was 'locked,' and did not run; they had deep water at all times, and the hundreds of steamboats carried more passengers than their Circle Centure Railroad.

"The other section of the exposition was at Vincennes, the great American annex, and the word was passed around that here the great engineers and manufacturers of America had unlimited space to show their machines. This Vincennes was a park that it took about an hour by river or railroad to reach. They finally completed the first underground Paris electric railroad, and then you could reach Vincennes Park in thirty minutes. Its beautiful railroad, no smoke or dust, and sides lined with white marble or tiling, and on the hottest day you could wear an overcoat. About 5000 people visited Vincennes exposition daily. They were mostly engineers and mechanics, and as they came especially for business, and had nowhere else to go, they generally bought what they wanted. The Vincennes Park project was a great undertaking. As you know, I opposed this division of our exhibits, but I am pleased to say that all our largest business was done at Vincennes, and this end of it was a great success.

"Paris in 1900 illustrated ideas and carried them out from beginning to end. Here it showed the cotton plant, the growing stalks, the cotton huller, the cotton gin, the bale, the spinner, the weaver and the complete dry-goods store. This was done also in wool and silks, in chocolate, in wine, beer and champagne in great profusion, and you could drink the samples of these latter articles at almost every fifty feet in the whole ground. This immense saloon business in all sections looked bad. It occupied too much room, and detracted from the exposition.

"In the prize awards at the Paris Exposition the jury on machinery consisted of eighteen of the best engineers, picked from each country in the world; in fact, the high standing of the juries was commented on. The awards were—1st, honorable mention; 2d, bronze medals of first and second grades; 3d, silver medals, first, second and third grades; 4th, gold medals, three grades, and 5th and last, the much-sought distinction, 'Grand Prix.' This latter distinction also at times conferred the 'Legion of Honor' on the head officer of the corporation.

"The United States received 'Grands Prix' on woodworking machinery, machine tools, pumps, planes and fine pottery.

"In visiting the other countries, such as Belgium, Holland, Denmark, Sweden, Germany and other parts of France, I had exceptional advantages for observation, our representatives in each country giving me the entre to any place I wished to visit. I went through large plants, some of them primitive and of the most antiquated style, and others with the latest and most approved appliances that money could buy or up-to-date engineers devise. These opened their doors and tried to show courtesy to the American visitor, and tried to extract information in their line from one who had been heralded to them as a great engineer. The program was all cut and dried in many

cases, and I lost little time. Many of my trips were made into the small, ambitious 'Villes,' that, as you approached them from the hills, looked like the old feudal towns, with their gilded spires and pointed battlements, their walled moats and semi-fortified walls. We were met with hospitality and drank their homemade, musty-smoked beer and wine and smoked their twisted rolled cigars. Their great hospitality and their easy way of living contrasted strangely with the bustle, push and force that I have been accustomed to, and it looks as if we were doing them harm in introducing our nervous disorders by rudely awakening them from their dream.

"At Dusseldorf, on the Rhine, I found a city of phenomenal growth, houses building in blocks, factories by the dozen. It is a great railroad center. It has a new bridge over the Rhine, with street-cars running over it to the factory town. No city in America, even in the palmy days of American booms, showed greater activity, and factory after factory has the sign 'Maschinen Fabrik.' All is due to Americans who are selling their products there until a factory starts to make the exact article, which has the greater sale, and then others follow. The Niles Tool Works are godfathers to a new 'Deutsche Niles' at a suburb of Berlin. It has been fitted to make tools from Niles' exact drawings, and it is fitted up regardless of cost with every appliance known to modern shop practice, everything but the men, who were not up in any way even with American foremen and superintendents.

"In looking at the captured French cannon at the museum in Berlin I met an old German officer. He said his regiment went into action at Gravelotte about 1200 strong, and only 155 came out.

He said the French were superior in small arms, but their cannon were worthless, all muzzle-loaders. Most of the old cannons had been reborred and rifled, and the balls had pins drilled into them to make a fit. He said no army could fight with that kind of weapon against such as the Germans had, and they simply could not fire them. I had some business with a French officer; he is an engineer and captain in the French artillery. He said: 'I don't think our infantry is quite equal to the German, but our artillery is now superior, and is better manned.' He assured me of this, and said: 'If the test comes you will see.' This French report is corroborated by the American officers sent by the United States government to watch the French maneuvers this summer.

"I found in all countries (and I travelled with a trunk) the American is favorably received. \*Even in Denmark and Holland as soon as they recognized an American they never opened his trunk, but chalked it up and said 'fin.'

"The competition in all lines in Europe, especially in machinery, both from United States and foreign competition, is becoming great. All selling agents for American goods gradually are becoming manufacturers themselves, first for a few choice machines, and gradually taking in the whole line they had been previously selling. As the ownership of the selling department is very important, this plan closes the American manufacturer out until he can organize another selling department.

"An engineer visiting Europe for the first time is struck very much at the great progress that has been made since the World's Fair in Chicago in 1893. Americans are still a little in advance, but it will not be for long, as they are not doing their part as they should. An American doing business with Europe should speak

and write both French and German, otherwise he is at a great disadvantage, especially if he gets down to show the practical man the benefits of his tools or goods. Every business man of any standing in Europe speaks two languages besides his own, and it is impossible for a clerk to get a position in a counting-room or office unless he speaks at least two languages, and so any customer, no matter where he comes from, can be accommodated and spoken to in any of the large offices. In Cincinnati and most of the American cities the office people, as a general thing, speak only one language, and this is to be deplored. We are getting just like the English—if you want some one in your office to speak more than one language you must hire a foreigner.

"Europe is making rapid strides in manufacturing, and I saw good lathes, planers and drills from Sweden. I saw in Berlin for sale a turret automatic lathe that was made in Sweden alongside of its American model, and the seller thought the Swedish was almost as good, and was much cheaper.

"I regret exceedingly that I did not visit Europe ten years earlier. There is much to see and learn if you wish to cater to their wants, and often the things that go well in our country are not so well adapted for their use, and the manufacturer who thinks he can force his exact ideas just because they go in America will find he is badly mistaken."

#### In an American Switzerland.

##### Editor Manufacturers' Record:

This county (Ashe) is in the extreme northwestern part of North Carolina, in the corner adjoining Virginia and Tennessee, and is appropriately called the Switzerland of America. Situated right on the summit of the Appalachian range of mountains, it is 3000 feet above the sea-level, with some points reaching an altitude of 5500 feet, but yet possessed of a climate from April to Christmas unexcelled anywhere in the world.

That this country will one day be one of the most important sections of the United States is beyond question, for there is strip of country about seventy-five miles in width, beginning with the Iron mountains, in Virginia, running parallel with the Blue Ridge through North Carolina and extending over a part of Tennessee, through Georgia and a part of Alabama, which is one continuous bed of ore.

A short description of this, I think, would be of interest to men who are interested in mineral, and I will only mention veins which have been developed sufficiently to determine the quality and quantity of the ores. Beginning with the zinc mines of Smyth county, Virginia, and traveling south just eight miles, the iron mountains of Smyth and Grayson counties are reached, with their immense beds of red and brown hematite iron ores, and coming down on the south side of the mountain the famous marble and limestone quarries of Grayson country are approached; passing over the Virginia line into North Carolina, on both sides of New river, for long stretches of miles, immense deposits of the finest magnetic iron ores are found. Some work is being done on these veins now. Five miles further on, in a branch of the Pheonix mountain, we find large deposits of titanic iron ores, and looking to our right, fifteen miles to the west, stands Elk Knob, with its 30-foot vein of copper sulphurites; then turning southward we find copper, both native and sulphurites. One of these veins was worked extensively about ten years ago by the Ore Knob Copper Co., but owing to the then great distance from a railroad and the cheapness of copper, the works

went down. Then further south, over the Blue Ridge, we have large deposits of manganese, talc and kaolin; then gold sets in.

Between these two copper sections we have a network of mica veins extending through Ashe, Watauga, Mitchell and Yancey counties, interspersed with soapstone and asbestos. In these counties we have every kind of mica known to the trade—amber, green, white, black and speckled. It is a well-established fact that North Carolina mica is of the finest quality known.

The business of your correspondent is mica mining. This was selected out of a hundred other things for the reason that when mica is prepared for market it is not so bulky, and can be drawn by wagons thirty miles to the railroad with small cost and at a small profit.

We located here because we know this country, with its vast resources, will attract a railroad soon, and will not be always in its present undeveloped stage, and this article is written, hoping that it will catch the eye of some of our Northern brothers who have capital and are seeking a profitable place of investment for it, and persuade them to come down with it, and they will be met with the outstretched hand of welcome and with the hearty co-operation of every good citizen.

C. L. ZELL.

Jefferson, N. C.

#### Literary Notes.

The United States in the Orient. By Charles A. Conant. Publishers, Houghton, Mifflin & Co.

America's Economic Supremacy. By Brooks Adams. Publishers, The Macmillan Company.

No question is attracting more attention among men in divers walks of American life than the future of this country, as hinging upon questions related to its manufactures and exports. The settled conviction held by the long heads in business and statesmanship that the country has entered upon a stage of its career from which there is no withdrawal, and that it is facing problems which must be settled upon an eminently practical basis if the country is to be prosperous, is rapidly permeating American life. These problems are directly connected with America as a world-power, and the part, as such a power, it is to play in the East. The development of this power and the ultimate place of the United States among the nations are subjects of fascinating interest, and books which treat of the one from the standpoint of far-reaching information, and of the other with broad, reasonable imagination, are bound to appeal to an increasing number of readers. In his work, "The United States in the Orient," Mr. Charles A. Conant, who, as a journalist at Washington, has had special opportunities for studying in its many phases the question of the position of the United States in the East, presents in seven chapters, some of which originally were contributed to the Atlantic Monthly, the North American Review and The Forum, intensely interesting material from the social and economic point of view of imperialism, of the struggle for commercial empire among the nations, of new opportunities for capital, and of the new economic problems now confronting society, with special reference to those which the United States will have to face, and its equipment for solving them by political organization through natural resources and in economic and social development, and specially of Russia as a world-power.

The concluding chapter of Mr. Brooks Adams' "America's Economic Supremacy" dwells upon Russia's interest in

China, and how the United States are affected thereby. He, too, traces the struggle among the nations and the decadence of England as seen in its career in recent years in the West Indies, and more lately in marked degree in its experience in the South African war. He takes the ground that the point has been reached at which the financial center of the world, upon which world-history turns, is to swing eastward from London or westward from the United States. The inclination is at present in the latter direction, but whether or not it is to be maintained depends largely upon whether Russia and Germany, acting in concert, may be able to shape events in the East. Against such a concert the author points to an Anglo-Saxon alliance which would alter profoundly the equilibrium of the world. Exchanges, he contends, would then move strongly westward, existing ideas would soon be as obsolete as those of a remote antiquity, and probably human society would then be absolutely dominated by a vast combination of peoples whose right wing would rest upon the British Isles, whose left would overhang the middle provinces of China, whose center would approach the Pacific, and who would encompass the Indian ocean as though it were a lake, much as the Romans encompassed the Mediterranean. Both of these works bear strongly upon the discussion of the changes to be wrought in America before the United States can assume successfully the responsibilities and cope with the dangers incident to its taking the place which England has enjoyed since the battle of Waterloo.

The Gavel and the Mace. By Frank W. Hackett. Publishers, McClure, Phillips & Co., New York. Price \$1.25.

The onlooker at various men and women in this country, steadily increasing every year, and not excluding entirely legislative bodies, observes that a great part of the time is occupied in disputes over questions of parliamentary law, and this, too, in the face of the fact that more than one manual or treatise on the subject are available and are used. The explanation, perhaps, is that the first acquaintance of the average man and woman with parliamentary proceedings comes to him or her at the first meeting attended. This book, by Mr. Hackett, promises to work a revolution in this respect. He has hit upon the idea of carrying the subject to parliamentary practice from the literary standpoint, and to frame technical matters in attractive diction, illustrated by copious references and allusions to notable events in the great legislative bodies of the world. From a well-stored mind he has produced in forty-six chapters an entertaining volume which will be attractive to professional lawmakers, to members of all kinds of bodies where it is attempted to do everything decently and in order, and to individuals who belong to no such organization, or do not expect to do so.

The Tuck Publications. Raphael Tuck & Sons, Ltd., New York.

One of the features of the publishing business at the holiday season is the work in the artistic publications of Raphael Tuck & Sons, Ltd., New York. Their efforts this year to produce gift, juvenile and toy books, calendars, booklets and Christmas cards, maintaining the high reputation for interesting text, original design in illustrations and high-class lithography which has commended the publications to the public, have been eminently successful. It would be difficult to discriminate in praise among such calendars as "The Guardian Angels," "Days of Delight," "The Grecian Graces," "The

Longfellow" and "The Glory of the Year," the latter in six sheets, bearing appropriate selections from Shakespeare and landscapes of seasons, surrounded with sprays of natural-size typical blooms. But there is one calendar, "The Alma Mater," which will be most popular among thousands of college graduates, especially those of Harvard, Yale, Pennsylvania, Chicago, Princeton and Columbia universities, each of which has a separate sheet with the representation of a beautiful woman garbed in the colors of the university, a view of which forms the background. Among the publications of the firm for children are Father Tuck's Annual, containing a great number of stories and poems by Nora Hopper, E. Nesbit, Clifton Bingham, M. A. Hoyer, and illustrations in color or in black and white by Lewis Wain, M. Bowlet, H. Cowham, Helena Maguire and others, and a new edition of Grimm's Fairy Tales, illustrated by E. J. Andrews and S. Jacobs. Among the novelties are "Echoes of Friendship," containing selections from Tennyson; the "Forget-me-not," with illustrations from Longfellow; "At Home," a tastefully-illustrated book for memoranda of engagements. Many beautiful surprises appear in the Christmas and New Year cards, with their water-color, ivory and satin effects, cameo-like in many cases, with their etchings, water colors and half-tones.

#### BUYING FOR DOMESTIC USE.

##### Feature of the Week's Iron Transactions at Birmingham.

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., November 20.

The market the past week offers a good deal for contemplation and not much for comment. These letters have clearly forecasted the market, which has been just as was predicted. All one can say of it is that it was strong and the sales were large. The week opened at \$10.75 for No. 2 foundry, with the other grades following at a difference of fifty cents for each grade. This was maintained during the week without any concessions in price, for it was well understood that the price would be \$11 for No. 2 foundry as soon as circumstances permitted. That the price was accepted as satisfactory is evidenced by the large transactions, which have aggregated for the month in the neighborhood of 300,000 tons. The various pipe works, as well as the foundry interests, were free buyers, and the purchases went well into the first half of 1901. The feature in the market was the large buying for domestic account. The disposition to extend the deliveries was pronounced, and a very fair amount of purchases extended into 1901 up to May and June.

Some export business was done, but it was limited. Anyway, all the room offering was taken. Some No. 1 foundry was taken around \$12.25, but it was special brand, and some No. 2 foundry was taken at \$11.25 under the same circumstances. Buying on the basis of \$10.75 for No. 2 foundry was free. The market was put to \$11 for No. 2 foundry Friday night, and the buying on Saturday showed a falling off. But the close of the week generally shows a falling off in buying. No. 3 foundry went at \$10.25 to \$10.50. Some gray forge sold at \$10, but the larger sales were at \$9.75. No. 4 foundry sold at \$10. The large sales for the month leaves the market in a very comfortable condition and the furnace yards pretty well cleaned up, especially of the higher grades. Some of them have more of the low grades than they desire, but none of them are carrying an amount to occasion any uneasiness. The only fur-

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naces that have been idle with which there is connected any talk of resuming operations soon are the Woodstock furnaces at Anniston. A good deal of figuring is being done, and it appears probable that they will go into blast at an early date. No others wear the same state of expectancy.

There has been some demand for steel for export account, and a few thousand tons have been placed for that trade. It could have been materially increased had the steel mill been in condition to accept new business.

The reports concerning the absorption of the Tennessee Coal, Iron & Railroad Co. by the American Steel & Wire Co. are as yet only reports. The prominent officials here have nothing authoritative as yet, but there is a general credence given the reports. It is also rumored that the Alabama Steel & Wire Co. is absorbed by the same corporation. But it is simply impossible to confirm the reports. If true, the high contracting parties are not yet ready to make the deal public.

Reports indicate a transfer of the controlling interest in the street railways, and they bear the earmarks of probability.

Everything so far indicates continued investments in the district, and this is the best evidence of confidence in its future.

J. M. K.

#### Active Iron Market.

Matthew Addy & Co., Cincinnati, under date of November 19, write:

"It is already evident that to the furnaces selling foundry pig-iron November is going to be a record-breaker. August and September, 1899, were months of enormous tonnage of new sales, but November promises to surpass them. And the most remarkable thing about the present buying is that there are, comparatively speaking, but few large lots. Several 5000-ton lots and one or two 10,000 deals are the sum total of the large purchases. The bulk of the buying has been in much smaller lots, and it has been general to a most surprising degree. It seems as if almost every consumer of pig-iron has bought something. There has been, of course, a heavy tonnage of new business for shipment up to July 1, 1901, but probably most of the sales have been for shipment during the next three months, while the orders that call for immediate delivery are taxing the abilities of the furnaces to load and ship. The amount of iron that is now moving from furnace yards to consumers' yards is so great that the railroads are not able to rise adequately to the occasion, and from every quarter we have complaints that enough freight cars cannot be secured to handle the tonnage offered. All these facts point the right way.

"The market price of Southern and Hanging Rock irons is now \$1 per ton higher than it was November 6, and the advance in price has been accepted cheerfully. There are no complaints on that score. Unless the buying ceases abruptly—and all signs indicate that there is no probability of this—further advances may be expected. They will come naturally as the situation continues to develop."

#### The Iron and Metal Trades.

[Special to Manufacturers' Record.]

New York, N. Y., November 21.

In its review of the week the Iron Age says:

"This has been another week of rushing business in nearly all the branches of the iron and steel trades, and the buoyant feeling continues. In the aggregate the tonnage placed during the last six weeks has been enormous, and prices have generally advanced moderately, except where

powerful consolidations, like the sheet and wire concerns, have kept values on an even keel.

"Producers of finished material are more concerned at present as to the prices for coke and for ore for the coming year than they are about effecting further sales. Gossip has it that lake ore will be \$1.50 lower than it was for the season of 1900-1901, while nothing has transpired as yet as to coke. Until these questions are settled many concerns will proceed cautiously as to future sales of finished iron and steel.

"Sales of foundry, forge and basic pig-iron have again been very liberal, one striking feature being how widely distributed the business has been. Sellers now are getting into the position of trying to hold down tonnage by demanding further advances. It must be admitted, however, that some buyers are not willing to commit themselves beyond the winter on the ground that the better prices will lead to a rapid rise in the output. As a matter of fact, quite a number of furnaces are now preparing to resume, but in the majority of cases have already made quite extensive sales. The splendid general outlook for business for the whole country dispels doubts as to the next year, and this encourages blowing in. To a certain extent the statistical situation seems to make this imperative, and so far as the trade at large is concerned, a desirable development.

"There is some movement in steel billets, although, of course, the great bulk of the tonnage goes from steel plant to mill under sliding scales or through identified interests. We are advised by the management of one large consolidation that no purchases of steel are likely, since its steel plants are now making 4400 tons per day. It was generally believed that some buying would come from this source.

"Both Eastern and Western rail mills report further heavy sales of rails, and enough is known that further tonnage for new undertakings is bound to come up. On the other hand, the girder-rail business seems to have permanently fallen off, the great work of initial construction having been pretty well completed for the present.

"In the plate trade some additional large orders have been placed in the leading markets.

"A good deal of work is coming up in structural material. The American Bridge Co. have in the one department of mill and factory buildings placed 12,000 tons in one week.

"For car material the orders have been rolling in heavily, large contracts for axles, for instance, having been placed. Chicago reports one transaction involving 7000 axles.

"In the wire branch a very heavy business is being done. The leading interest has been selling at the rate of 8000 tons per day. The domestic trade is very heavy at unchanged prices. The export movement is good as to volume, but prices are low.

"The bar and sheet mills are under a tremendous pressure, the market for the former stiffening steadily. The manufacturers of cold-rolled shafting have come together again and have restored prices.

"Copper is strong, while tin has had an upward jump. There have been some heavy purchases of spelter in the St. Louis market, which it is surmised may have some connection with the contemplated consolidation of the smelting interests."

The sales in the Joplin (Mo.) district during the week ended November 17 were 9,539,820 pounds of zinc ore and 1,134,800 pounds of lead ore, valued in all at

#### FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

##### TRADE WITH SYRIA.

###### Openings in That Country for American Manufactures.

Philippe, Tuckel & Co. of Beyrouth, Syria, in a letter to the Manufacturers' Record write:

"We were the first in Syria to try the introduction of American products, and after long correspondence and heavy money outlay we have come to the conclusion that only the following goods could be brought in greater quantities to the Orient, viz.: Iron and steel for construction, general hardware, pig lead, solder lead, pig and band iron, tinplate and sheets, corrugated iron, copper in sheets, wire nails, cheap iron barb wire, iron wire, copper wire, galvanized-iron wire, bedsteads, screws, calf leather, salted rawhides, newspaper, sole leather, pasteboard for shoemakers and bookbinders, wrapping paper, rubber goods, such as shoes and mantles.

"Agricultural implements are of small importance in Syria, owing to the rocky country and the poverty of the population. There are very few large land-owners, as all the land is divided into very small pieces, each having a poor proprietor, who could or would not be able to spend from \$50 and upwards for improvement of his soil. Our peasants are the most conservative people in the world, shunning every innovation. Their way of tilling the soil is the same as 3000 years ago.

"A great hindrance to the increase of American import trade in our country is generally the demand of American manufacturers to deal directly with the local merchant without the intervention of our agent, whilst European manufacturers dislike to enter personally in contact with Syrian firms, their representative doing all the work. Another hindrance is generally the payment terms, such as cash against shipping documents in New York, when we can get in Europe for all of our customers six months' credit from date of arrival in harbor. We do not ask at present for such a credit, but only the condition that payment should be made at arrival of goods against documents.

"We have been trying for a long time to induce some New York shipping firms to send regularly once a month their steamers to Beyrouth and the Syrian coast, but it was of no practical use. One New York company, the Barber Line, is represented in Beyrouth by the agents of the Prince Line, who have themselves ships running via Naples to New York. Even if the direct line, New York-Beyrouth, would for the beginning take little cargo for any of these harbors, yet it would be a very great inducement to merchants in ordering their merchandise from America. At the same time we could procure to the steamers on their homeward trip (New York) every time from 400 to 600 emigrants, a cargo which is not to be undervalued. It would be of very great use in strengthening the relations of both countries if you would promote the idea of direct steamship communication in your valued journal.

"We represent already the American Steel & Wire Co. of New York for Syria, Palestine, Cyprus and Southern Asia Minor on the commission basis, and would gladly take the agency of leading American manufacturers in above-named goods for these territories, and also Egypt and the rest of Turkey, as we have in the principal coast and inland

towns first-class correspondents and agents."

##### Wanted in India.

In a letter to the Manufacturers' Record Ardashir Nōwroji & Co. of Bombay, India, express a desire to get into direct communication with the manufacturers or exporters of the following:

Meat choppers, juice extractors, fruit presses, measuring tapes, scales, hinges, padlocks, cast-iron brackets, sad-irons, rat-traps, door-knobs, glass, etc., handles, crucibles, etc.

Saws, files, augurs, bits, screws, drills, axes, etc.; brass and iron wire, wrought-iron rose nails, hooks and eyes, bolts and nuts, washers, rivets, etc.

Glassware, crockery, enamelware, cups, tumblers, pots, saucers, dishes, etc.; lamps and parts of lamps.

Dry-mixed paints and enamels, dry colors, turpentine, bronze powder, glue, varnish, etc.; cheap patent medicines, surgical instruments, rubber syringes, etc.

Scissors, knives, forks, razors, etc.; fancy leatherware, bags, belts, albums, boxes, stationery, collars, etc.

Beef, ham, bacon, ox tongues, preserved fishes, etc.; galvanized buckets, screws, perforated zinc sheets, fencing wire, cast-iron rainwater pipes and connections and other sanitary articles; coal tar, pitch, rosin, etc.

Shafts, poles, buggy heads, etc.; iron works, stump joints, axles, springs, steps, etc.; gig harness, furniture, saddlery, saddles, japanned and split leathers, morocco and other sorts of leathers.

Leather belts, picking bands, leather pickers, cotton bandings, roller cloth, clearer cloth, roller skins, cheap cylinder and spindle oils; also engine, shafting and other lubricating oils, glass, etc., lubricators, valves, rubber and core packings, asbestos packing, rubber insertions, pulleys, pulley blocks, oakum, ratchet braces, beiler composition, etc.; also chemicals.

Hair brushes, horn combs, hairpins, perfumery, violet powder, scented soaps, etc.; Edison's and other electrical specialties, mutoscopes, musical instruments, etc.; iron bedsteads, wooden furniture, paint brushes, cheap watches and clocks, etc., etc.

##### Galveston Harbor.

Capt. C. S. Riche, United States engineer in charge of the Galveston district, has forwarded to the Secretary of War data relating to the deepening and widening of the Galveston ship channel and a general expansion of the harbor facilities of the port. It is proposed to hold at Fort Worth on November 30 a convention to further action for the protection and improvement of Galveston harbor and island. Leading citizens of Texas are enthusiastic over the convention, and take the ground that its object is not for the benefit merely of Texas, but also of a large area in the West and Northwest, which naturally seeks an outlet at Galveston to foreign parts.

##### Texas Pacific and New Orleans.

L. S. Thorne, vice-president of the Texas & Pacific Railway Co., recently arrived in New Orleans to examine plans for the additional elevator which this company is to erect at Westwego. In an interview relative to this and other improvements which are being made Mr. Thorne said:

"Within the next sixty days the Texas & Pacific will have let a contract for the erection of another elevator at Westwego, with a capacity enabling it to handle 1,000,000 bushels of grain. Our present capacity in this respect is only 340,000 bushels. In addition to this improvement, we purpose to extend our wharf facil-

ties about 3000 feet, which will give us an aggregate of nearly 6000 feet of wharf space at Westwego. The contract for this additional wharf space will be let within the next sixty days and the work completed in time to handle the next grain crop, in June.

"These improvements involve a large expenditure, of which New Orleans will get the advantage. Just how much money the new elevator and other contemplated improvements at Westwego will cost it would not be possible for me to say, but that it will reach well up into the thousands there can be no question."

Referring to the prosperous condition of the Texas & Pacific generally, Mr. Thorne said:

"In addition to the hundred freight cars we have built in our shops this year, we have bought 800 from outside shops during the same period, and twelve new engines. We have also built five new engines at our shops in Marshall, Texas. All of these additions have been made necessary by the demands of increased commerce, especially in this section."

#### Barge Service on the Mississippi.

The St. Louis Steel Barge Co. has inaugurated its service of whaleback barges between St. Louis and New Orleans, on the Mississippi river. The first fleet consisted of two barges and a steamer loaded with miscellaneous freight, which included about 50,000 bushels of grain. The barges are constructed entirely of steel, with water-tight compartments, and can be loaded to draw twelve feet of water. They are 265 feet in length and 40 feet beam. The towing steamer is also of the whaleback pattern, with twin screws and 1200-horse-power engines. It is claimed that freight of all kinds can be transported by this system at a comparatively low cost, and the company anticipates an extensive river traffic. Henry S. Potter of St. Louis is president of the company, and W. A. Thompson, Jr., superintendent.

#### National Maritime Congress.

At the request of a number of Southern railroad and steamship companies, Governor A. D. Candler of Georgia has issued a call for a national maritime congress, to be held at Brunswick, Ga., on January 30 next. Its object is the promotion of the maritime interests of the country, particularly of the South. In his call the governor says that he is impressed with the importance of creating an interest in the maritime business of the United States and a sentiment that might tend to restore its former prestige as a great carrying power. Mr. C. D. Ogg, secretary of the Board of Trade of Brunswick, is in charge of the details of the convention.

#### To London and Hull.

It is officially announced that through the Illinois Central Railroad Co. arrangements have been made to establish two additional steamship lines out of New Orleans. One will run to London and one to Hull, England. According to Mr. Henry Baldwin, foreign freight agent of the Illinois Central, the vessels in the London service will be under the management of the West Indies and Leyland Line, while the Wilson Line will furnish the ships between New Orleans and Hull.

#### A New Steamship.

It is announced that W. & T. W. Pinkney of Sunderland, England, managing owners of the Neptune Line of steamers, have placed an order for a new steamer for the line to meet the demands of its Baltimore and Rotterdam trade, now employing steamers ranging from

2580 tons to 1910 tons register. The new steamer, which will be built abroad, will be of 8500 tons, will be built of steel, and will have a speed of eleven knots.

#### Baltimore to the West Indies.

The Baltimore & West Indies Steamship Co., organized at Baltimore some time ago with the view of establishing regular service between Baltimore, Porto Rico and Cuba, has revived the project. According to a statement of Mr. John S. Wilson, president of the company, it expects to construct two or three steamships of 2000 tons register to cost about \$250,000 each, if sufficient encouragement is given the enterprise.

#### Two More Steamships.

In addition to the other contracts recently secured, it is officially announced that the Maryland Steel Co. is concluding the negotiations to build two others for a Northern syndicate. It is stated that the vessels will carry at least 12,000 tons of cargo each.

#### Notes.

A large consignment of shoes was recently sent to the South African market by the J. K. Orr Co. of Atlanta, Ga. They will be placed in stores at Port Elizabeth.

A dispatch from Augusta, Ga., states that the contract for the improvement in the Savannah river near Augusta has been awarded to Capt. A. J. Twiggs of Augusta, whose bid was \$29,000.

A dispatch from Pittsburgh, Pa., is to the effect that arrangements have been made by the Pittsburgh Coal Co. to ship a quantity of coal to Baltimore, where it will be loaded for export. The necessary vessels have been secured.

Dr. J. R. Gabril of Fayoum, Egypt, writes to the Manufacturers' Record suggesting that the Egyptian Agricultural Exposition, which opens on January 1, 1901, will perhaps give an opportunity for Americans to exhibit agricultural machines, irrigating machines, etc.

Messrs. Flint, Eddy & Co., the well-known export firm of New York, has secured a charter under the laws of Virginia to conduct a general importing and exporting business, with \$500,000 capital stock. W. R. Flint, 30 Broad street, New York, is named as president.

The St. Louis & San Francisco Railroad Co., it is reported, has decided to equip a number of its locomotives with what is known as the Davis counterbalance, applied to the driving-wheel of the engine. The railroad company has made a number of tests of it. C. H. Gillman of Fort Worth is president of the Texas Locomotive Wheel Co., which controls the invention.

It is stated that the Merchants & Miners' Transportation Co. has purchased the steamship Hudson for its coastwise service from the Cromwell Steamship Co., of New York. The Hudson is of 1873 tons register, and is 297 feet long and 34 feet beam. It is understood that the company is considering the purchase of two other vessels as well.

The Tennessee Central Railway Co. has made contracts for the purchase of five locomotives and about forty freight and passenger cars, representing an outlay of \$52,000. The rolling stock was secured through the Cumberland Construction Co. of St. Louis.

According to a dispatch from Richmond, Va., the Seaboard Air Line has secured options on property on the James river, which, it is stated, may be used for additional terminals in that city.

## RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

#### Some Railroad Speculations.

In view of the gigantic railroad deals which are so rapidly coming to the front, may it not be possible that the Pennsylvania will secure a large interest in the Southern Railway Co., as it has done in the Chesapeake & Ohio and the Norfolk & Western, thus bringing the Pennsylvania—the greatest railroad system in some respects in the world—into still more direct connection with the Southern, and that a combination will be formed by which the Baltimore & Ohio, the Southern Pacific and the Seaboard Air Line will be brought into close relationship?

An extension of the Baltimore & Ohio to the Seaboard has often been discussed, and some plans therefor made. By such a connection the Baltimore & Ohio would get into the South, not necessarily in rivalry with the Pennsylvania and the Southern, but on the same friendly basis on which all big railroad operations are now moving.

The chairman of the board of directors of the Southern Pacific road was on Monday made a director of the Baltimore & Ohio, thus showing some possible affiliation or connection between the Baltimore & Ohio and the Southern Pacific. Over the Seaboard Line the Baltimore & Ohio could go into the South to Montgomery, and then by a combination with the Louisville & Nashville, or else by an independent route, a direct connection could be made at New Orleans with the Southern Pacific, and there would then be formed a transcontinental system big enough to rank as one of the big events of this wonderful age of consolidations. The reorganization of the Baltimore & Ohio was to a large extent financed by Speyer & Co. of New York, who are also largely interested in the financial operations of the Southern Pacific, having recently taken \$10,000,000 of new bonds of the Southern Pacific. It has been suggested that Speyer & Co. might also take the bonds of the Seaboard Air Line. This identification of interests would therefore bring about a financial connection as close as the physical connection would be should these surmises prove to have a tangible basis. At any rate, some gigantic railroad deals are evidently being worked out.

The Southern Pacific lately purchased a controlling interest in the Pacific Mail Steamship Line, thus getting direct connection from San Francisco to the Orient. Now, if this railroad combination should be made, and the same people secure the Atlantic Transport Line (for which some deal is in progress), operating steamers from Baltimore, Philadelphia and New York to London, they would cover the Atlantic, the Pacific and the continent from New York to San Francisco.

#### Southern Pacific Plans.

Mr. W. G. Van Vleck, general manager of the Southern Pacific Company, in a recent interview relative to the extensions and improvements under way, is quoted as follows:

"We are getting 125 miles of 75-pound rails for relief of lighter rails, 1200 new freight cars, ten new large mogul freight locomotives, four passenger locomotives and fifteen new vestibule chair cars. All of this property will be delivered, with the exception of the rails, by January 1. The rails will be delivered as needed. The greater part of the 75-pound rails will be laid in Texas, but the cars are for the Louisiana lines."

"Work is progressing on the extension between Beaumont and Dallas. We have already completed sixty miles of this road, expect to complete fifty miles more within the next four months, and the remainder in eighteen months. The completion of this branch of road will open the eastern part of Eastern Texas and place New Orleans in direct communication with the lumber districts and the iron districts of Cherokee county, Texas.

"I might also mention that we are laying a double track between Harvey's Canal and Algiers, which will be completed in a month. We have just completed six miles of double track in Iberia, and are arranging for two miles more in the same parish, which will be completed within the next forty or fifty days."

#### Annual Meetings.

At the annual meeting of the stockholders of the Baltimore & Ohio Railroad Co. the following directors were elected: Edward R. Bacon, Martin Erdman, John P. Green, Edward H. Harriman, James J. Hill, Sutherland M. Prevost, Norman B. Ream, William Salomon, Jacob H. Schiff, Charles Steele, James Stillman and Charles H. Tweed. Three new directors enter the board, Messrs. Erdman, Green and Tweed of New York. Mr. Erdman is a member of Speyer & Co., the well-known bankers, and Mr. Tweed is chairman of the board of directors of the Southern Pacific. Mr. John P. Green is first vice-president of the Pennsylvania Railroad Co.

At the recent meeting of the Atlantic Coast Line Railroad Co. of Virginia, North and South Carolina, the report submitted by President Elliott showed that the total mileage in these States is 1758. The gross earnings for the year under consideration were \$7,718,000. The operating expenses represented 68.8 per cent. of the gross.

The stockholders of the Richmond, Fredericksburg & Potomac Railroad Co. have elected E. T. D. Myers, president. The annual report shows the gross earnings to be \$993,000 and the net earnings \$421,000, an increase in net of \$95,000. A surplus remains of \$85,000 after deducting \$80,000, which has been appropriated for various improvements.

#### Great Eastern Railroad.

Several times recently the Manufacturers' Record has referred to what is known as the Great Eastern Railroad, upon which work has begun in North Carolina between Snow Hill and Fremont. Surveys are now being completed to Raleigh, and it is also stated that a route has been laid out to Pantego, on the Norfolk & Southern Railroad. A report is current in connection with this enterprise that the Norfolk & Southern Railroad Co. is interested in it, and that its completion means the extension of the Norfolk & Southern train service direct to Raleigh and Central North Carolina. Some time ago the Norfolk & Southern passed into the hands of representatives of the Vanderbilt Syndicate, which, it is understood, also controls the Norfolk, Virginia Beach & Southern. The total length of the Great Eastern Railroad will be about 100 miles. One of its principal promoters is J. H. McCleary of Suffolk, Va.

#### Queen Anne's Railroad Plans.

It is officially announced that the Queen Anne's Railroad Co. has decided to build the proposed extension from Queenstown to what is known as Love Point, on Kent Island. Love Point will be the terminus of the road on Chesapeake bay, and will be reached by regular steamer service from Baltimore. It is also stated that

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the company is considering a service from Washington in connection with the railroad to be built from that city to a point near the mouth of the Severn river. President William H. Bosley of the Queen Anne's Company has awarded the contract for ten additional passenger coaches, which will contain the latest improvements and be used in its express-train service between Love Point and Lewes, Del.

#### New Road for Nashville.

The city council of Nashville, Tenn., has decided to hold an election on December 15, and the question of subscribing \$1,000,000 to the capital stock of the Nashville, Florence & Northern Railroad will be considered. The company, which is headed by Mr. Jere Baxter of Nashville, Tenn., president of the Tennessee Central Railroad Co., proposes building from Florence, Ala., to Leitchfield, Ky., where it will connect with the Illinois Central Railroad. The route is by way of Nashville, and would give that city a new north and south route and allow the Illinois Central to enter it. The road, which will be 175 miles in length, has been under consideration for some time.

#### New Texas Line.

In a letter to the Manufacturers' Record Mr. R. H. Keith, president of the Eastern Texas Railroad Co., which was recently organized, states that this line will be about thirty miles in length, extending from Lufkin to Kennard. Surveys are being completed and the necessary material purchased to construct the line immediately. Mr. Keith, who is at the head of the Central Coal & Coke Co. of Kansas City, Mo., and is also interested in lumbering, states that the company will build a town at Kennard, which will be the headquarters of the company. At Lufkin a connection will be made with the St. Louis Southwestern, also the Houston, East & West Texas systems.

#### Dallas to Fort Worth.

Another company has been organized to build an electric line between Dallas and Fort Worth, Texas, under the title of the Dallas, Fort Worth & Southern Railroad Co. H. C. Stahl of Bellevue, Ohio, is one of the principal promoters. In an interview Mr. Stahl is quoted as saying that the company includes George T. Bishop, John Sherwin, John Masterton and others of Cleveland, Ohio. Mr. Bishop is interested in street railways. Mr. Sherwin is cashier of the Park National Bank, and Mr. Masterton is an official of the Lorraine Steel Co. The company is capitalized at \$1,500,000, and, according to Mr. Stahl, work will begin this year upon the road.

#### Extending to San Antonio.

According to a dispatch from San Antonio, Texas, about two-thirds of the grading of the extension of the Missouri, Kansas & Texas system from San Marcos to San Antonio is completed, and it is expected to begin laying rails by December 1. The Southwestern Improvement Co., which has the contract to build the line, expects to have it ready for train service by May 1, 1901. The Southern Pacific terminals at San Antonio will be used by the Missouri, Kansas & Texas, also the depot, which is to be erected. A number of large bridges will be required along the route, and considerable mason work.

#### To Develop Coal Beds.

According to the statement of General Manager Edgar A. Holmes of the Pittsburgh, Connellsburg & Wheeling Railroad, upon which work has recently begun in West Virginia, the line will cost nearly

\$4,000,000. It is expected to complete the road between Wheeling and Waynesboro, Pa., within the next eight months, as contracts have been let with this time limit. The road will extend through Marshall county, West Virginia, and Green county, Pennsylvania, where very extensive deposits of coking coal exists, and its construction will tend to stimulate mining operations in this field.

#### Testimonial to Mr. Smith.

The Atlanta & West Point Railroad Co., through its directors, tendered Mr. George C. Smith, the retiring president, a set of resolutions, in which his devotion to the company's interests and the ability which he displayed while at its head were referred to in fitting terms. The employes of the road presented Mr. Smith an elaborate testimonial of their appreciation in the form of a silver tea service and table service. As already announced, Mr. Smith will become manager of the St. Louis division of the Southern system.

#### Large Storage Battery.

The Baltimore & Ohio Railroad Co. has made arrangements to utilize a storage battery upon its belt line in Baltimore. The battery is intended for storing the surplus electric current used in operating the electric locomotives on this route. It will be one of the largest in the world, containing 320 tanks, representing an electric capacity of 1200 horse-power, or enough to supply all of the power for one electric locomotive, if desired, for a certain period. The battery will be installed in a building 145 feet long and about 45 feet wide.

#### To Buy the Baltimore & Lehigh.

Messrs. Alexander Brown & Sons have made a proposition to the stockholders of the Baltimore & Lehigh Railroad Co. to purchase their shares at \$70 a share. It is supposed that Messrs. Brown & Sons represent some other corporation which desires to operate this line or connect it with some other system. The Baltimore & Lehigh extends from Baltimore to Cardiff, a distance of forty-three miles, but can reach York, Pa., through the York Southern Railroad, which is in operation between York and Cardiff.

#### More Cars Needed.

The business of the Choctaw, Oklahoma & Gulf Railroad has assumed such proportions that Mr. J. F. Holden, traffic manager, in a recent interview stated that the company requires fully 1000 additional cars, beside the rolling stock it now has in operation. He states that fully 470 box and 250 coal cars are needed, although the company has recently received 525 cars.

#### Proposed Express Company.

A dispatch from Cordele, Ga., states that W. A. Hawkins of that town is interested in an express company to be formed to enter the field offered by the Southern States. It is stated that the company will be capitalized at \$5,000,000. Philadelphia parties are reported as interested with Mr. Hawkins.

The Missouri Pacific Railway Co. has given a contract to the Brooks Locomotive Works for forty-four freight and six passenger engines. With this order the Missouri Pacific has awarded contracts for eighty locomotives during the present year, which represent an outlay of about \$1,000,000.

It is stated that the Thompson Land & Investment Co. has arranged for the location of a \$100,000 hosiery mill at Huntsville, Ala.

## TEXTILES.

#### That Round-Bale Trust.

[Washington (D. C.) Post.]

For many years past the cotton planters of the South have been paying tribute to two of the very greediest monopolies in the country—the compress and the bagging trusts. Owing to extortionate charges imposed by these frugal institutions, the producers have had to pay at least \$1 per bale on their marketed cotton in excess of just and reasonable charges. The combination was complete. It could not be escaped from at any point. The planters had to take the bagging and ties at the monopoly's price, and they had to send their big plantation bales to the compress trust. In this way they contributed each year from \$9,000,000 to \$11,000,000 to these two concerns, and suffered a corresponding loss themselves.

Now comes to their rescue the new invention, the round-bale press, which, instead of being a trust, is a competitor, and of which Mr. S. E. Watson, a merchant and planter of Watson, Texas, thus writes:

"The round-bale press, instead of being a trust, is just the opposite. It is a competitor of the bagging trust and the compress trust. They are all fighting it. The bagging trust has raised the price of bagging and ties twenty cents per bale this year. The farmers all favor the round bale, first, because it will save them fifty cents per bale of the compress charges, and, second, it will save them \$1 a bale for bagging and ties from the bagging trust."

Such, indeed, seems to be the case. The round-bale press is fighting these trusts, and is, therefore, the target for their abuse and vilification. The latter scent the loss of these annual millions, which will now go to the cotton planter and swell the treasury of agriculture. Colonel Roosevelt and campaign orators of his class made much of the "round-bale trust" during the period of their greatest activity, and endeavored to besmirch the character of Hon. James K. Jones of Arkansas by showing that he was at the head of one of the most heartless and grinding monopolies in the living world. The facts repudiate these ridiculous propositions. The round-bale company is as yet in its infancy. At this moment the two monopolies we have mentioned control the field. No cotton planter, or factor, or shipping merchant is under the smallest obligation to use the new invention. On the contrary, it will take some years to establish the competition involved in that enterprise. But the round bale, with all that it implies, is a distinct boon to the cotton-growers of the South, and if it be judiciously and reasonably handled both parties to the transaction will be enriched.

#### The Cotton Movement.

In his report for November 16 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during the seventy-seven days of the present season was 3,999,922 bales, an increase over the same period last year of 255,554 bales, which, however, leaves a decrease in the supply of 240,810 bales; the exports were 1,965,911 bales, an increase of 325,584 bales; takings by Northern spinners were 533,647, a decrease of 65,176 bales; by Southern spinners 354,562 bales, a decrease of 14,290 bales.

#### Textile Notes.

Messrs. J. A. Yates & Co. are equipping a knitting mill at Twentieth street and Avenue B, Birmingham, Ala. Hosiery will be the product.

Gen. E. Bailey of Waukeenah, Fla., will build a cotton factory of 2000 spindles.

The Odell Manufacturing Co., Concord, N. C., will erect an additional story to its No. 2 building and install new machinery.

Wilm. F. Schiller, Jr., Libau, Russia, is in the market for about four tons monthly of white cotton waste. Prices and samples are invited.

The Danville (Va.) Knitting Mills has ordered new machinery for most of the improvements recently reported. A dyeing plant is part of the betterments.

A \$200,000 cotton factory will be built at Inman, S. C. Further particulars not as yet public, except that Jas. A. Chapman of Spartanburg, S. C., will be president-treasurer.

R. A. Hart of Baton Rouge, La., states that the proposed cotton-mill company lately reported is to have capital of \$125,000. All the necessary machinery for the mill will be wanted.

The Eagle and Phenix Mills, Columbus, Ga., is now adding the 7000 additional spindles recently reported as decided upon. This machinery is all either in transit or to be delivered by January 1.

Messrs. J. M. and D. L. Lewis of Sycamore, Ala., have purchased the McDonald Cotton Mills, a plant that has been under construction at Sylacauga. The machinery will be ordered at once and immediately installed. The spindles will number 10,000.

Messrs. Seth M. Millikin, W. F. Locke, E. W. Green and T. S. Van Volkenburg of New York and Stephen Green of Boston have been visiting the cotton-mill section of the Southern Piedmont region under escort of M. V. Richards, land and industrial agent of the Southern Railway.

Harriett Cotton Mill of Henderson, N. C., is about completing its plant, and expects to be operating next month. The two-story, 75x314-foot structure is now receiving its 15,000 spindles and 216 looms. The engine-room is a 40x80-foot structure. The company's investment will be \$300,000.

The Goldville (S. C.) Manufacturing Co., reported lately at length, states that its building will have accommodations for 10,000 spindles, although but 5000 will be installed at the start, making the investment \$100,000. The engine will be of sufficient size that the 10,000 spindles may be reached without adding power machinery.

The Raleigh (N. C.) Hosiery Co. states that its improvements, lately reported, will be pushed to an early completion. The new three-story brick 40x100-foot building will be supplied with water from a 10,000-gallon tank; a 180-light dynamo will supply lights, 80-horse-power boiler will supply power; a dyeing plant and heating system will also be installed. By February 1 the new quarters will be occupied and employing 150 operatives, with a daily output of 450 dozen pairs of hosiery.

Active work continues near Jackson, Tenn., for the erection of the Bemis Bros. Bag Co.'s mill and the establishment of the mill town "Bemis." The company's five-story 125x280-foot structure is complete, and the machinery is about to be installed. The 1000-horse-power engine is now on the ground, and the other machinery has been ordered, including 20,000 spindles. A 100x310-foot warehouse and forty-five operatives' cottages are nearing completion. Probably spinning will be commenced next March, and during 1901 a 280-foot addition will be built to the main building. The St. Louis parties controlling this company are investing about \$500,000 in this project.

## COTTONSEED OIL.

This department is open to the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

### American Cotton Oil Co.

The Manufacturers' Record has just received the annual report of the American Cotton Oil Co. for the fiscal year ending August 31, 1900. In this report an elaborate statement of capital, liabilities and assets are given, also a general profit and loss account of all the properties on August 31, 1900. The amount of the capital stock issued and outstanding is unchanged, viz., common stock \$20,237,100, preferred stock \$10,198,600.

Of the \$3,068,000 8 per cent. debenture bonds outstanding at the date of last report, \$68,000 have been bought by the company and cancelled. The remaining \$3,000,000 have been extended for the period of fifteen years from November 1, 1900, and bear interest at the rate of 4½ per cent. per annum. The profits for the year amounted to \$1,739,449.28, from which is deducted debenture-bond interest, amounting to \$242,266.67, leaving net profits \$1,497,182.61. From this amount dividends on preferred stock at 6 per cent., amounting to \$611,916, and dividend on common stock at 3½ per cent., amounting to \$708,298.50, are deducted, leaving a balance carried to general profit and loss account of \$176,968.11. The permanent investment account has been charged with the sum of \$326,331.19 for additions to the properties, and has also been credited with sales of inactive properties, machinery, etc., amounting to \$228,875.52, the net result being an increase to this account of \$97,455.67. The working capital and surplus of the company on August 31, 1900, was \$4,828,571.49, of which \$885,019.47 was cash in banks and \$3,943,552.02 was bills and accounts receivable, marketable products and supplies. The physical condition of the properties continues to improve. The sum of \$326,087.38 has been spent during the year in repairs, additions and betterments, and charged to operating expenses, which may be considered an ample equivalent for depreciation of properties during the same period. During the past year the company had to deal with diminished receipts of seed, resulting from the smaller cotton crop, the consequence of which was a higher range of values of all products. Notwithstanding these conditions, the volume of business done by the company almost equaled that of the preceding year, when the cotton crop was the largest of record and low prices prevailed.

### Cottonseed-Oil Notes.

Among the foreign exports of cottonseed products last week from the port of Galveston, Texas, were 46,879 sacks of cottonseed meal for Hamburg and 3594 sacks for Antwerp, the total value being \$70,276.

The cottonseed-oil mill just erected at Camden, S. C., by the Atlantic Oil Co., has been in operation now about three weeks. About forty hands are employed during the day, with the same number as a night force.

The Cullman Cotton Co.'s cottonseed-oil mill at Cullman, Ala., has commenced operations. The mill will have a capacity of twenty-five tons of seed per day. The company will put in a guano factory, utilizing the manurial properties of the seed used at the oil mill.

Quotations for cottonseed oil in New York on Wednesday evening last were as follows: Crude tanks, forward South, 25 to 26 cents; crude in barrels, 20 to 20½

cents; summer yellow, prime, 22 to 23½ cents; summer yellow, forward, 32½ to 33 cents; white, 34 cents, and winter yellow, prime, 37 to 38 cents.

The Columbus Oil Mill of Columbus, Miss., the construction of which began last spring, is now completed and in full operation. The mill is of the latest type, well equipped with the most modern machinery, and has capacity for crushing eighty tons of seed per day. It is under the management of Mr. R. L. Lewis, son of Mr. John A. Lewis, vice-president of the Mississippi Cotton Oil Co.

There has been compiled and is now being published at a nominal cost a copyrighted map of the cotton-growing States. This map shows the location of all the cottonseed-oil mills in the South, the number of presses in each and information as to whether they grind their cake and whether oil is refined at the mill. The H. W. Caldwell & Son Co. of Chicago, equippers of oil mills, issue the map.

The Houston Post quotes the market for cottonseed products in Texas as follows: Prime crude oil, loose, 24½ to 25 cents, and prime summer yellow oil 27½ to 28 cents; linters, per pound, 3½ to 4 cents, all f. o. b. mill Texas interior points, according to location; hulls, baled, \$4 per ton; prime cottonseed cake, \$21 to \$21.25, and prime cottonseed meal, \$21 to \$21.25 delivered at Galveston; cottonseed at station, \$10 to \$12.50.

A fire at Houston, Texas, last week destroyed the refinery of the National Cotton Oil Co., located just beyond the city limits, entailing a loss of about \$100,000. The entire building, a large wooden structure covering several acres of ground, was completely destroyed, together with 3400 barrels of refined oil, 950 barrels of crude oil, soap stock, 5200 new barrels, machinery, etc., involving a loss of about \$100,000, fully covered by insurance. The company will rebuild as rapidly as possible.

The market for cottonseed oil in New Orleans has been somewhat irregular during the past week, values at the close being steady, with a good foreign export demand. Shipments to Austria, France and Denmark amounted to 4076 barrels for the week ending the 15th inst., and for the season 20,383 barrels, against 21,051 barrels last season. Receivers' prices are as follows: Cottonseed, \$15 per ton (2000 pounds) delivered here; cottonseed meal jobbing at depot, \$22.25 to \$22.50 per short ton, and \$23.50 to \$23.75 per long ton for export f. o. b.; cottonseed oil 24 cents per gallon for crude loose f. o. b. in tanks here; in barrels, 25 cents; refined oil at wholesale and for shipment in barrels, 20 to 31 cents; oilcake, \$23.50 to \$23.75 per ton f. o. b.; linters, 3 to 4½ cents per pound, according to style and staple; hulls delivered at \$3 to \$4 per ton, according to the location of the mills.

It is announced that the Consolidation Coal Co. of Baltimore has arranged to purchase about 60,000 acres of coal land in the vicinity of Meyersdale, Pa. The coal is to be reached by a branch line from the Baltimore & Ohio, and it is understood that the Consolidation Company intends conducting mining operations on an elaborate scale. The property is located in Somerset county.

Mr. G. H. Ehlers of the Maryland Steel Co., which is constructing for the United States government the immense floating dry-dock which is to be placed at Algiers, La., has reached New Orleans to superintend the work of constructing the shore connections and building the bridge piers which will support the tram cars used in carrying heavy material from the shore to battleships in the dock.

## LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

### LUMBER MARKET REVIEWS.

#### Baltimore.

Office Manufacturers' Record,  
Baltimore, Md., November 21.

A better movement in nearly every line of the local lumber market is indicated by the volume of business during the week, and the demand is more general in character. Among lumbermen generally during the week there has been considerable interest taken in the proposed combination to control North Carolina pine, and dealings in this commercial wood show a hardening tendency to values. In the local market flooring and box lumber are both in good demand, and buyers whose stocks have been allowed to shrink are now in the market for desirable lots. The matter of a decrease in collections of wharfage, which is announced for October, does not indicate a decline in prices of lumber, but, on the contrary, shows a decrease in supply, which at the moment gives the local market a firmer tone. There is a fair trade in white pine, with prices firm and tending higher. Georgia pine is decidedly improving, while spruce and cypress are steady, with a better inquiry. In hardwoods there is some improvement, and the demand from nearby towns is better, with prices throughout the list firmer. Good dry stocks of hardwood are scarce at all milling sections in Virginia, West Virginia and Tennessee. The outlook for a good foreign export trade in hardwoods is not at the moment very promising. Reports from the United Kingdom show the markets as quiet, with a light inquiry.

#### Norfolk.

[From our own Correspondent.]  
Norfolk, Va., November 19.

Manufacturers of North Carolina pine and all others engaged in the lumber trade in this section have settled down to business, and as political affairs are about adjusted as far as the election is concerned, all indications point to a successful lumber trade during the winter months. The season is now well advanced, and no unusual activity is expected until spring opens, but those engaged in the industry look forward to a steady business, with substantial improvement in prices. Stocks of lumber at all milling points are by no means excessive, and in some instances are badly assorted. The better grades of lumber are scarce, and Nos. 1 and 2 flooring are held at outside figures, while box grades are more plentiful, but there is no accumulation of stock, as the demand is now becoming more general in character. Planning mills are all reported very busy, and many of them working overtime in order to keep up with contracts. The foreign demand for North Carolina pine is moderate, but with the prospective domestic inquiry the amount going forward to the United Kingdom and continental ports will not be great, especially when ocean rates are so high and steamer room scarce. The combination to control North Carolina pine is again spoken of, and it is stated that negotiations are pending to consolidate the various companies, the total value of the plants being about \$25,000,000. The companies which have already agreed to enter the combination are said to be the Tunis Lumber Co. of Baltimore city, and with mills at Norfolk; the Surrey Lumber Co. of Baltimore, with which Governor John Walter Smith is connected; George F. Sloan & Bro. of Baltimore; the Suffolk Saw-Mill Co. of Suffolk, Va.; the Roper Lumber Co. of

Norfolk; the Roanoke Railroad & Lumber Co. of Norfolk; the Gay Manufacturing Co. of Suffolk, Va.; the Greenleaf Johnson Company of Norfolk; E. E. Jackson & Co., of which ex-Governor Jackson is a member; the Virginia Saw-Mill Co. of Norfolk; W. W. Tunis Bros. Lumber Co. of Norfolk; Wiley, Harker & Co. of New York city. It is not known what position the Cummer Lumber Co. will take, as also that of the Camp & Roland Company of Norfolk. It has been suggested that an independent company may be organized to fight the combine if carried through successfully.

#### Charleston.

[From our own Correspondent.]  
Charleston, S. C., November 19.

In all lines of the lumber industry in this section there is a decided improvement, and the outlook, as indicated by the present activity among millmen, both here and at adjacent points, is very promising. There is both a domestic and foreign inquiry for lumber, and prices for all desirable grades are very steady. During the past week the following shipments were reported: Eight cars of lumber for Liverpool and 19,000 feet of lumber for Baracoa. The schooner Standard cleared for New York with 230,000 feet, and several vessels are now loading for Northern ports. At Georgetown the activity among lumbermen is greater than ever before in the history of the port. Last week was a record-breaker for shipments of lumber, about 2,500,000 feet being cleared for New York, Boston and New Haven. Of this amount, the Winyah Lumber Co. shipped \$35,000 feet. The new steamer Waccamaw, the first of the Atlantic Coast Steamship Co.'s line to load lumber at Georgetown, was cleared for New York on the 17th inst. by the Atlantic Coast Lumber Co. with the largest cargo of lumber that was ever shipped from that port. It was of North Carolina pine, and measured 1,200,000 feet, and was consigned to the Export Lumber Co. of New York city. This is only the beginning of a largely-increased traffic in lumber from Georgetown, and with all the mills in full operation shipments will likely be doubled. The offering of tonnage is better, and rates a shade easier. During the past week the schooner Georgetta Laurence, 280 tons, was chartered to load lumber at Georgetown for New York ex wharf on private terms, and the schooner Bayard Hopkins, 212 tons, from Georgetown, S. C., to Philadelphia with kiln-dried boards at \$5.

#### Savannah.

[From our own Correspondent.]  
Savannah, Ga., November 19.

The features surrounding the lumber trade in this section present a decidedly active tone throughout almost every avenue of the lumber industry. The demand from Northern centers is improving, and orders are coming to hand very freely. Nearly all the mills in Southern Georgia are running regularly, and the output is about sufficient to supply the fairly active demand. The demand for local building purposes at all interior points in the State is now showing a material increase, and prices are generally firm, with a hardening tendency. The meeting of the Georgia Saw-Mill Association, which was held at Valdosta on the 13th inst., was one of much importance to the mill men of this territory. The improved conditions of the markets and unusually heavy demand have encouraged mill-owners, and the advance in prices will enable many of them to catch up again for the losses of the past few months. This association has had a steady growth, and is now in a very flourishing condition. Mr. H. H. Tift is president, and Mr. F. E. Weymer, secretary, of the association. The foreign de-

mand for lumber and timber is much better, and during the past week some good-sized lots have gone out to Havre, Liverpool and Santos. A line of steamers to Cuba and Porto Rico is again talked of, which, if established, would be of great benefit to the lumber trade of the port. It is stated on good authority that the agent of the Munson Line of steamers at this port had received advices from his company stating that it had not abandoned the idea of establishing a line of steamers to the West Indies. With an export freight rate on grain from the West and the coal and lumber regions of the South an immense trade is sure to be built up with West India ports. The movement at nearby Georgia ports is assuming active proportions, and mills are busily engaged on orders. At Brunswick a number of vessels are in port loading lumber and crossties, and others are due to arrive. Freights are somewhat easier; recent charters as follows: Schooner Alice Archer, Brunswick to Camden, Maine, with lumber at \$7, to the West Indies \$8 and to New York at \$5 to \$5.50.

#### Mobile.

[From our own Correspondent.]

Mobile, Ala., November 19.

A decided improvement has characterized the lumber market the past week, and over 6,000,000 feet left the port for United Kingdom, continental and other ports. The demand for lumber from foreign markets is quite pronounced, and numerous inquiries are coming to hand by every mail. Dry bright yellow-pine lumber is getting more popular at European centers, and it is expected that a brisk demand will set in this winter. Of the shipments last week, nearly 3,000,000 feet went to Holland, and large shipments were made to South Africa, Cuba and the United Kingdom. From Moss Point, Miss., large shipments of lumber are being made, over 2,000,000 feet going out to Rio Janeiro and Cuba. The sawn timber market continues quiet, with but few sales at quotations of 13 cents per cubic foot. The action of the Gulf Coast Lumbermen's Association in reducing the output will have the effect of stiffening prices within the next sixty days, as all the mills throughout the entire Gulf coast are making very little timber. During the past week the steamship Goodwood cleared for Liverpool with 27,496 cubic feet of hewn timber, 40,121 cubic feet of sawn timber and 507,642 feet of lumber. The steamship Blenheim cleared for Rotterdam with 20,731 cubic feet of sawn timber and 1,198,891 feet of lumber. The market for ocean freights is decidedly lower, which is having a good effect upon the general lumber market. Charters are reported of an Italian ship, 1188 tons, from the Gulf to Buenos Ayres with lumber at \$14.50, and a Norwegian bark, 1342 tons, from Mobile to Montevideo with lumber at \$14.50.

#### Proposed Lumber Combination.

The Manufacturers' Record in its issue of the 8th of November chronicled the arrival of capitalists at Norfolk, Va., for the purpose of negotiating a deal for the control of the North Carolina pine interests of Virginia and Eastern Carolina. As a result of the conference held at Norfolk prior to the election and negotiations which have been pending in New York during the past week, it is stated that a certain number of mills in the North Carolina Pine Association have agreed to enter a combination to control the market for North Carolina pine. It is understood that all the capital necessary to secure the consolidation will be forthcoming, and that the Belmonts will finance the deal, the total value of the various plants being about \$25,000,000. The name of the

new concern will be the United Lumber & Timber Co. All of the companies in a position to turn out lumber manufactured and seasoned under the most modern methods will, it is said, be included in the combination. Leading Baltimore companies which have entered the combination admit that the deal is being negotiated, but do not care to discuss the prospect of its being carried out successfully.

#### Lumber Notes.

Receipts of lumber at New Orleans last week amounted to 1,957,000 feet, and for the season 34,919,121 feet, against 28,790,371 feet last season.

Mr. S. R. Lee of Pollock, La., president of the Georgetown Lumber Co., has been appointed receiver for the Boston Lumber Co. of Selma, Grant parish, Louisiana.

The plant of the Youngblood Lumber Co. at Augusta, Ga., was destroyed by fire last week. The loss is estimated at about \$25,000, insured for about one-half that amount.

The pencil factory recently established at Shelbyville, Tenn., continues to make large shipments almost daily, while the movement in lumber and logs in that section is remarkably active.

The Greenleaf Johnson Co.'s mills at Berkley, Va., are now running day and night, employing a large force of hands. E. H. Barnes' box factory at Berkley has started up again, after a short suspension.

The Roganville Lumber Co. of Roganville, Jasper county, Texas, has been chartered, with a capital stock of \$25,000. The incorporators are W. Travis Croker, James H. Hooker and J. Marshall Hooker.

Shipments of lumber last week from the port of Mobile aggregated 5,952,390 feet, nearly 1,000,000 feet of which went to Port Natal, South Africa. Shipments of timber amounted to 27,496 cubic feet of hewn and 60,852 feet of sawn timber.

The Arkansas Lumber Co. of Wells, Cherokee county, Texas, has been chartered, with a capital stock of \$25,000. The incorporators are E. H. Williamson, W. H. Holmes of Cherokee county and H. C. Williamson of De Queen, Ark.

The Tunis Lumber Co.'s saw-mill plant at Berkley, Va., has been secured by the Providence Box Co. of Providence, R. I., and will be used as a branch box factory until a large factory plant can be erected. J. K. Tunis of Baltimore will be superintendent.

The crosstie industry in Loudoun county, Virginia, and adjacent sections is at present very active, some 50,000 ties at different stations on the railroad awaiting shipment. Large shipments are made regularly from Fredericksburg by barges down the Rappahannock river.

The Greensboro Spoke and Bending Works of Greensboro, N. C., has been purchased by a company composed of J. G. Foushee, G. A. Smith and J. H. Whitt, the name of the concern to be known as Foushee, Smith & Co. The business will be enlarged, making spokes, handles, rims, picker-sticks, etc.

A late addition to the wholesale lumber trade of Baltimore is the firm of Munroe & Co., composed of Messrs. George A. and George S. Munroe, who until recently were connected with the Chesapeake Lumber Co. of this city. The firm will handle a full line of hardwoods, white and North Carolina pine.

The schooner Mary B. Judge cleared from Jacksonville, Fla., last week for Baltimore with 365,000 feet of yellow-pine lumber, and the schooner Maggie G. Hart for New York with 430,000 feet.

The Clyde steamer Comanche cleared for New York with 275,000 feet of yellow-pine lumber among her cargo.

Messrs. P. E. Hickle & Co. of Indiana are erecting a large saw-mill at Brownsville, Tenn. The firm has bought a large tract of timber near Brownsville, which it will commence to develop about the 1st of December. The tract abounds in hickory and oak, and large shipments will be made by the firm to Memphis and other points.

The Hatfield Lumber Co. is to establish a large saw-mill plant at De Witt, in Dinwiddie county, Virginia. The mill is to be provided with all kinds of modern improvements, among which will be band saws. The company has purchased from W. R. McKenney of Petersburg 50,000,000 feet of standing timber in Dinwiddie county.

The plant of the Union Hardwood Co. at Union, S. C., is approaching completion. The company is awaiting the arrival of machinery for making picker-sticks. Mr. S. M. Rice, Jr., is president of the company. A furniture factory is in course of erection adjoining the Union Hardwood Co.'s property, and is capitalized at \$7000.

Messrs. Garred & Lowry of Huntington, W. Va., have purchased the timber on the tract of land on Dingess run, Logan county. The tract embraces about 25,000 trees of the finest oak and poplar in West Virginia. The firm will at once commence cutting timber, employing about 100 men. The timber will be put into Guyan river, one mile above Logan C. H.

The Michigan Lumber Co. was incorporated last week at Memphis, Tenn., for the purpose of manufacturing lumber and operating one or more saw-mills in Tennessee. The incorporators are Francis Lilly, R. G. Harrison, F. E. Turrell, L. M. Nebblet and L. B. McFarland. The capital stock is placed at \$700,000. The headquarters of the concern will be in Shelby county.

It is stated that the Garbutt Lumber Co. has just closed a deal for several thousand acres of saw-mill timber in Coffee county, Georgia. This company owns and controls about thirty miles of railroad iron, which, when the company moves, will be put down between Douglas and the Ocmulgee river, making a connection with James' Railroad from Augusta to Valdosta.

Arrangements are being made to construct locks which will be used on the Lake Borgne canal in Louisiana. The Illinois Steel Co. will build the locks, which will be among the largest in the South.

A deal was closed at Rome, Ga., last week by the Virginia & Carolina Chemical Co. for the chemical plant located in that city. The new owners will increase the output to four tons a day. The price paid for the plant is not stated.

The British steamship Ratho cleared last week from Savannah, Ga., with 1800 tons of high-grade Florida rock and other cargo for Bremen, and the British steamship Ellenbridge for Stettin with 3741 tons, valued at \$42,500.

The Hard Rock Co. of Standard, Marion county, Florida, composed of Messrs. Christie, Low and Heyworth of Fernandina, is shipping five cars of phosphate rock per day. F. F. Trout is manager for the company.

The phosphate business at Fernandina is said to be showing considerable improvement in shipments, December promising to be quite an active month.

## PHOSPHATES.

#### Phosphate Markets.

Office Manufacturers' Record,  
Baltimore, Md., November 21.

The local phosphate market has ruled quiet during the past week, with a moderate inquiry from fertilizer manufacturers. Tennessee rock is a shade firmer for domestic, while South Carolina and Florida business also gives a better tone to the industry. The following charters were reported during the past week: British steamers Hexham, 1046 tons, and Thomas Mebrille, 1066 tons, from a Southern port to United Kingdom or Continent with phosphate rock on private terms; schooner Maud Palmer, 1529 tons, from Charlotte Harbor to Baltimore with phosphate rock at \$2.25; a German steamship from Hamburg to Port Royal or Charleston with kainit at 9/9, and British steamers Daventry, 1579 tons, and Miles Coverdale, 1475 tons, from Hamburg to Charleston or Savannah with kainit at 9/6. During the past week the various reports from points of production in the Southern phosphate belt are somewhat more encouraging. In the Tennessee field the weather during the past week has been very favorable for mining, and there is a better demand, both local and foreign. Miners, however, confine the output to an immediate demand, and stocks, as a consequence, are not accumulating. Prices for export rock are very steady, with holders firm and refusing to make any concession in price. For domestic rock the market is a shade better, with values showing a slightly higher tendency. In Florida miners are generally working their plants, and in Polk and Marion counties shipments of hard rock to the ports are increasing. Shipments of pebble continue quite active to the several ports of shipment. In pebble phosphate Port Tampa seems to be taking the lead in shipments, and the demand, both local and foreign, is reported a shade better. The mining interests in South Carolina are being taken care of, and the leading phosphate companies are curtailing their output, while during the past week there has been more selling, with prices steady.

#### Fertilizer Ingredients.

The ammonite market is a shade easier, Western packers showing a disposition to make concessions in prices for nearby shipments. Tankage and dried blood are not offered freely. Nitrate of soda is quiet, with a fair offering of spot, but no pressure to sell. Sulphate of ammonia is reported steady for early shipments, and very little inquiry for spot parcels.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)....	\$2.75	@ 2.80
Nitrate of soda, spot Balto....	1.85	@ 1.90
N. York.	1.77	1.80
Blood .....	2.30	@ 2.35
Azotine (beef).....	2.32	2.35
Azotine (pork).....	2.32	2.35
Tankage (concentrated).....	2.20	@ 2.25
Tankage (9 and 20).....	2.25	& 10@ 2.30 & 10
Tankage (7 and 30).....	19.50	@ 20.00
Fish (dry).....	24.00	@ 25.00

#### Phosphate and Fertilizer Notes.

The charter of the Richmond Guano Co. of Richmond, Va., was filed last week to do business in that State. The capital stock is \$300,000.

State Phosphate Inspector Vance of South Carolina was at Beaufort last week on his usual inspection tour among the phosphate properties of the State.

The steamship Gottfried Schenker sailed from Port Tampa on the 16th for New Orleans to finish her cargo with cotton. She took 2075 tons of phosphate for Flume, Austria. The British steamer Sandfield arrived at Port Tampa on the 15th for a cargo of phosphate.

## MECHANICAL.

### Brick Machine with Spur Gear.

Manufacturers of bricks are as progressive as those engaged in other lines of production, and equally as ready to become acquainted with improvements in the machinery they use. The design and construction of brick machinery has claimed the attention of the most ingenious inventors and the most completely equipped machine works. Such construction has developed into a separate industry, and the machinery now offered for working clay into bricks has reached a high state of perfection. Brick manufacturers, or those likely to become engaged in the industry indicated, are asked to direct their attention to the accompanying illustration of a brick machine constructed with spur gear. The designer and builder of this machine states that it is a radical change from those of old style, and claims that its press, working entirely in the clay, prevents all leakage on the outside and eliminates entirely the wearing of the mud-press and press-box, said to be a source of much trouble in soft-mud machines. The Horton Manufacturing

press, and in case any hard or foreign substance should enter the press-box this wing would be forced back, allowing the press to reach its extreme downward movement without injury to it or the machine. Just back of this wing and under the grinders is a space or receptacle, which acts as a guard against any foreign substance entering the press-box. This receptacle is formed in building the machine by dropping the bottom, forming a space about thirty-two inches square eight inches below the grinders. This space fills with clay, which remains in the machine, and, in case stones or loose grinders work forward, they are forced down into this receptacle, and never get to the press.

The mud-press is driven by two steel arms which extend from each end of the mud-press head up to a heavy cross-bar, which is pivoted to the large steel lever on the top of the machine. This lever is pivoted at its back end to a post that stands on the pug tub, and to its front end is fastened the upright connecting rod by a ball joint box. In this connecting rod is arranged the press-regulating device, the rod being slotted at its lower end, so as to allow the box on the wrist pin of the main crank to slide up and down in it.

The press is regulated by placing the pressure-plate in the notches over the sliding-box arranged for it. The nearer the plate is placed to the sliding-box the

At the front end of the mold table are the usual iron rolls and bumper irons. The mold table holds three molds outside of the machine, giving the striker opportunity to strike two molds at one stroke if he so desires. The front of the machine over the molds is arranged, when so ordered, with automatic stone doors, each one of which is held in place by a three-leaf, oil-tempered spring. When any foreign substance, such as stone, brick or iron, gets into the mold, these doors fly open, allowing it to pass out without injury to the molds or machine. The open-end die is used over the molds. This allows the stones, etc., to pass out easily, and in case of the die getting clogged with grass or roots it can be quickly and easily cleaned by opening the doors. These doors are used on the "Hercules" only when specially ordered, or when the buyer does not expect to use a disintegrator or rolls to crush the clay before it enters the machine. The die may be readily changed to change the size of brick.

The mold stop will work on either side. All that is necessary to change it from a right to a left-hand machine, or vice versa, is to change the mold stop and the extension on the mold-press table. The mold has a clear passage from the machine, there being no posts, braces or holding-down bolts for it to catch against.

The mold press consists of a bar about the length of the mold, rounded on its

mold that is liable to catch it, should the operator in sanding get his mold only partly in and be caught by the mold press. The side-plates are made with heavy open jaws, the same as a large punch, which allows a mold to be released when it passes from under the die.

The boxes are well babbitted and protected from the dirt and clay. Those at the end of the pug mill have collars on the inside and outside of the pug tub, so that no clay can work through and get into the bearings.

Every machine is fitted with Horton's positive clutch hub coupling, which is arranged to start or stop the machine without stopping the engine. This device is claimed to be superior to a friction pulley, because of its extreme simplicity. It is never out of order, always positive in its operation. There is no adjustment necessary to make it hold.

The machine's simplicity is seen in the fact that it has only five bearings, two gears, two revolving shafts, one cam, one crank. It is low down, therefore it is convenient to get the clay into it.

It has an open-top pug mill, so that it is easy to get at the grinders, wipers or press, to see at all times the condition of the clay, and change the temper instantly when it is either too wet or too dry.

None of the machinery is covered up so as to be out of sight, all being accessible; wearing parts are all adjustable.

The clay can be worked as stiff as it can be dumped out of the molds, as the crank has a double purchase on the press by reason of the transmission of power by the large steel lever which connects the driving crank to the press.

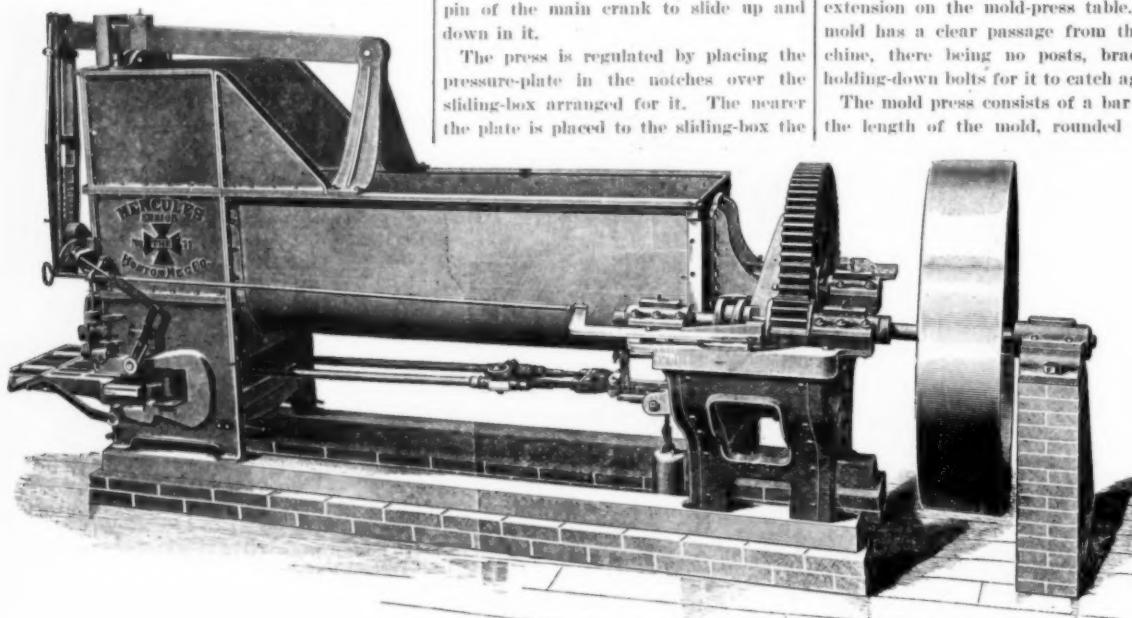
The ample pugging capacity is a strong point, as the mill is 12 feet long by 30 inches wide and 36 inches deep, giving ninety cubic feet of actual pugging surface, and this, with the extended top, holds sufficient clay to make 2000 standard brick. Machine's capacity per ten hours is 40,000 to 50,000.

The "Hercules" runs easily, the clay is not confined in a closed pug mill, and it has few working parts to cause friction. It requires from fifteen to twenty horsepower to operate it to its full capacity, the difference being according to how stiff the clay is worked.

When the molds have to be trucked away some distance to the drying ground, eighteen is the number commonly used. If sanding by hand, using the pallet system, seven or eight is all that will be required. In using a sanding machine, from ten to twelve will be wanted.

### Durant Counting Machine.

Many manufacturing and other industrial plants know the need of a reliable counting machine to tally the product of machinery they may operate. The need of such a device resulted some years ago in the introduction of automatic counting machines. These came into use rapidly, and are today giving satisfaction to some of the most prominent companies and firms in this country. The counting ma-



BRICK MACHINE CONSTRUCTED WITH SPUR GEAR.

Co. of Painesville, Ohio, builds this machine, and because of its improved features a complete description of it is here presented.

The vertical mud-press consists of a heavy iron head, 32-inch by 9-inch face, located in the clay directly over the mold, which works in a press-box, three sides of which are formed by the side-plates of the machine; the fourth side, next to the pug mill (from which direction the clay comes), is formed by a wing about six inches wide running across the machine. The lower edge of this wing is fastened to a shaft, which is boxed in the sides of the machine, running through far enough to receive a lever on the outside. This wing the maker styles its automatic relief. The clay comes over this wing direct from the wipers of the pug mill, and as the press passes down below the top of this wing, if too much clay has been admitted under the press, this wing is forced back and the surplus clay escapes to the pug mill. The wing is held in position by a lever, to which is attached a spring and adjusting wheel.

By increasing or diminishing the tension on the spring, pressure of the clay in the mold may be regulated, as it makes the pressure practically automatic. This wing acts also as a safety device for the

higher the press will be raised, so that the desired quantity of clay may be taken under the press to fill the mold as desired. The wipers on the main shaft work within one inch of the press-box, insuring the perfect filling of the same.

The manner of filling the press-box insures the making of brick which are straight and of the same weight and size after being burned, the end compartments of the molds being filled equally as well as the center ones.

At each end of the press-box is an adjustable plate, against which the press works; this may be adjusted against the press should it ever become necessary to take up wear.

The mold table is arranged so that it may be raised or lowered to suit any thickness of brick by simply turning the screws in front and rear.

The molds stand on four steel rolls while being filled. These rolls are provided with long bearings, and an oil-box is so arranged that it can be kept full of waste to keep out the sand and clay, and insures their bearings being kept well lubricated. This device allows the mold to push out easily, reducing the friction and wear on the molds. They may be lowered or raised in the mold table to conform to the surface of the same.

front side and mounted on two flanged rolls, which travel on the bedplates of the iron mold table. To this bar are fastened two rods, attached near the ends of the mounted bar. These run back, connecting with the mold-press slide by entering loops in such a manner that they may be adjusted by set-nuts to push the mold out the right distance. Near the back end these rods are jointed with a simple knee or toggle joint. These joints are thrown slightly out of line, and are held in place by a chain which passes around a pulley on each joint and back over a pulley fastened to the back frame of the machine.

To this chain is attached a weight of sufficient heft to draw the mold press back, and also serves the purpose of holding the toggles stiff in line.

In the operation of the mold press the cam on the large gear-wheel forces the mold slide forward, and in event of the mold press meeting with a greater resistance than is necessary to push the mold out, the toggle joints allow the rods to spread, stopping the mold press and permitting the cam to pass the roll without undue strain on the machine or mold. The joints are then drawn into position by the weight automatically, ready for the next mold.

There is no obstruction in front of the

chine manufactured by W. N. Durant of Milwaukee, Wis., have been on the market twenty years, and their success is attested by a long list of buyers. They are offered in different forms, as the character of their intended work may require. An illustration of a simple form of the "Durant Counting Machine" is illustrated



COUNTING MACHINE.

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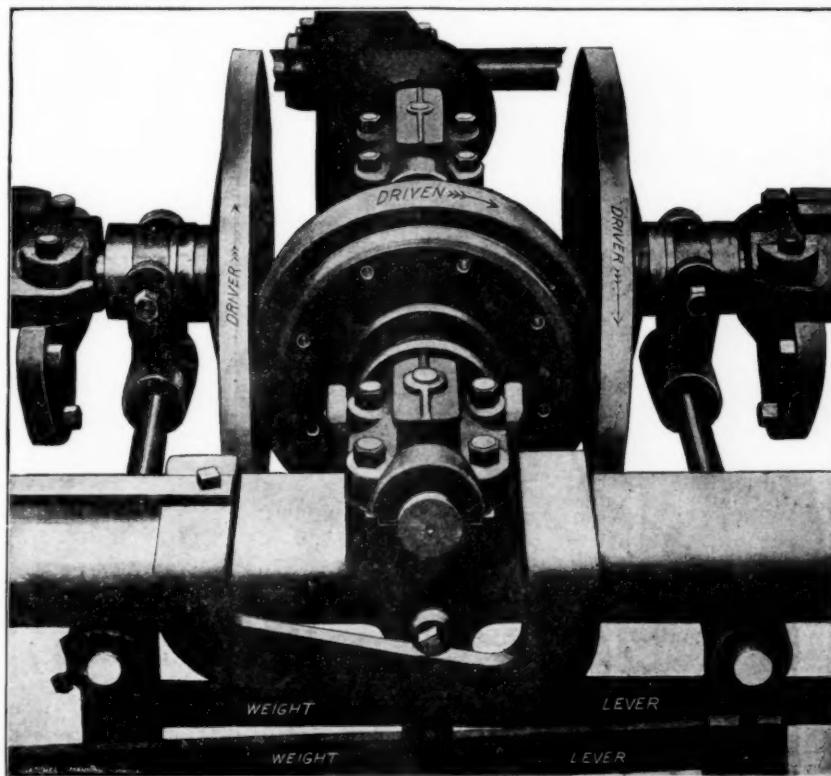
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herewith. For information regarding the complete line now being marketed, address the maker as above.

#### New Compound Variable Feed.

An important branch of the manufacture of woodworking machinery is that



NEW COMPOUND VARIABLE FEED.

producing inside molders and flooring machines. The great value of a variable feed mechanism for machines of this class has long been recognized, both by woodworkers and makers of the machines. Different forms and ideas in this field have been developed, with varying success. It is thought that the use of electricity would give the ideal variable feed, but it seems that the time is not yet ripe for the introduction of thoroughly electrically-driven machines. The H. B. Smith Machine Co. of Smithville, N. J., has for years been making a line of woodworking machinery that has satisfied many exacting users, and upon exerting its efforts upon the production of a satisfactory variable feed evolved an apparatus that it claims can be relied upon. This compound variable feed is now being placed on the market. A description of its construction, workings and application is of interest. The three elements, power, speed and continual contact, necessary for the successful using of friction, are met in the following manner:

**Power.**—This is obtained by a high ratio of compound in the gearing, and by working at the long end of the lever, so to speak, in arranging this mechanism.

**Speed.**—By using a high ratio of compound in the gearing, it is possible to run the discs to such speed that they will give the required friction.

**Continual Contact.**—This is obtained by weighting levers, which keep the driver in constant contact with the driven.

By running the matcher belts over a drum on the second countershaft not only is room obtained to place this mechanism inside the machine, but also the power and efficiency of these belts are increased.

By referring to the illustration it can be seen two dividing discs are used, driven in opposite directions by means of open and cross belts. These discs, running in opposite directions, will impart a single motion to the driven friction wheel. Ball bearings are placed behind the hubs of

these discs to take the thrust, and collars attached to the shifter forks are placed back of the ball bearings. The rock shafts to which these shifter forks are attached are weighted under the girts. The inclined carriage raises the weight levers to draw the driving discs from the

The driven wheel is made of special form of fibrous material, which gives the best possible pull. It will be seen that this mechanism furnishes a very powerful variable feed, always at the operator's command, and with a reverse feed ready should he need it.

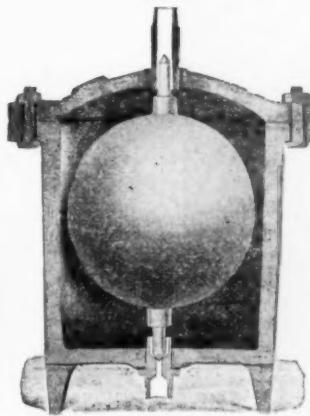
tricity, and consisted of brass and iron valves and cocks for all pressures, brass and iron fittings, steam specialties, engineers' supplies and steam and gasfitters' tools.

The Crane Company was the only exhibitor of this class of goods to receive a gold medal. The exhibit was tastefully arranged, as will be seen from the accompanying illustration, and gave an especially good opportunity to visitors to study approved modern methods of piping, flanged work, etc., for power plants, a branch of the business of this company which has become very important.

#### Eureka Steam Trap.

Since the earliest utilization of steam for generating power and transmitting heat, engineers in charge of steam plants have recognized the necessity of removing the entrained or condensed water

Inlet.



EUREKA STEAM TRAP.

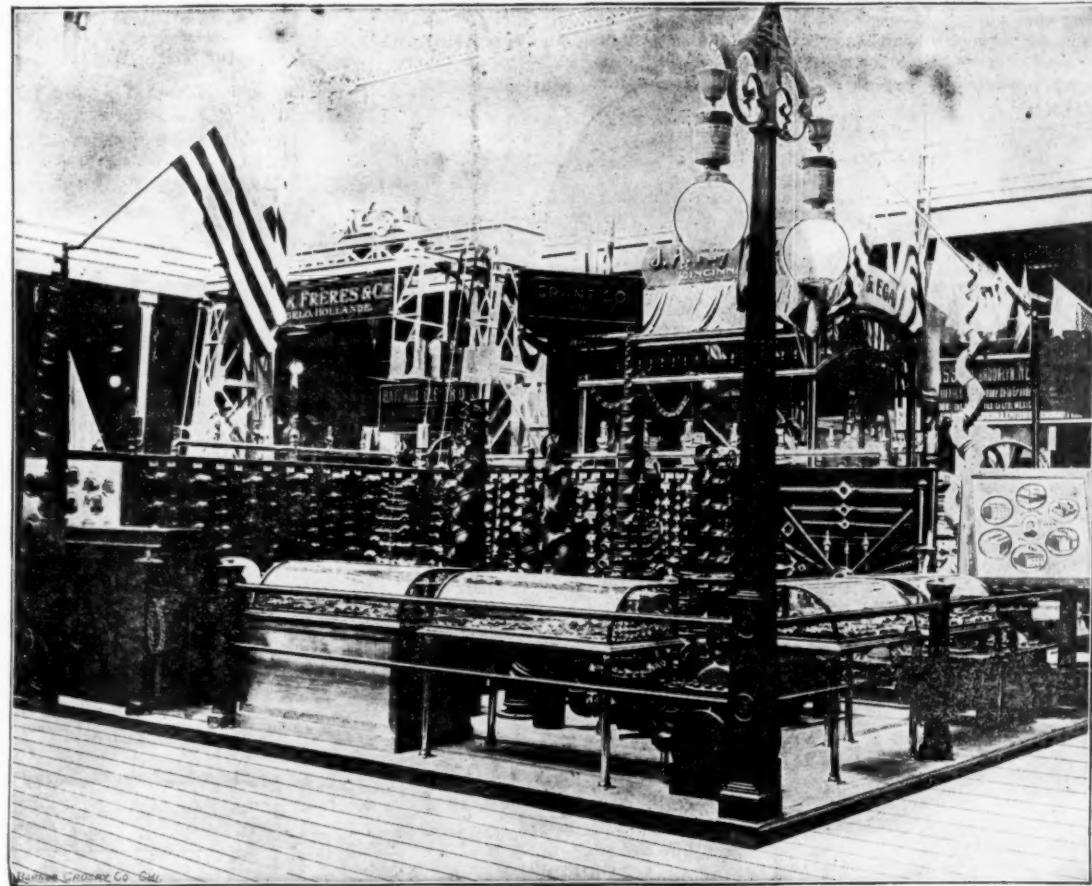
from the pipes conveying steam to the power generator or the radiating medium. Devices innumerable have been invented to accomplish that result. A steam trap,

driven wheel, and drops them to engage. This carriage is operated by a lever at the infeeding end of the machine for starting and stopping feed.

By another lever, located close to the

#### Crane Co.'s Exhibit at Paris.

One of the exhibits at the Exposition Universelle, Paris, which attracted wide attention was that of the Crane Com-



CRANE CO.'S EXHIBIT AT PARIS.

first, the driven wheel can be shifted to or from the centers of the drivers to decrease or increase the feed, and if thrown clear across the center will immediately reverse it for backing out in case of trouble at any of the heads.

pany, which claims to be the largest manufacturer of valves and fittings in the world, head offices and factories located in Chicago.

This exhibit occupied a desirable position in the palace of machinery and elec-

tricity, and consisted of brass and iron valves and cocks for all pressures, brass and iron fittings, steam specialties, engineers' supplies and steam and gasfitters' tools.

The simplicity of the "Eureka Steam

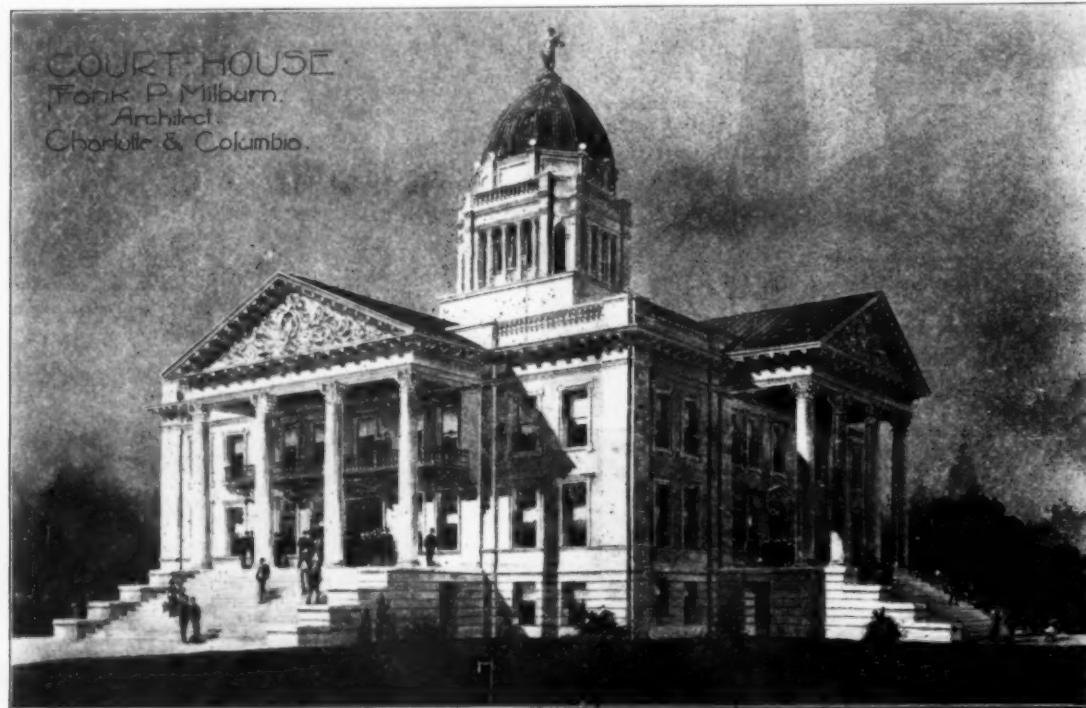
"Trap" renders lengthy explanation unnecessary. It is positive in action. The weight of the float and the pressure effective on the area of the valve stem keeps the outlet closed until the submergence of the float overcomes the weight and pressure; the float then lifts the valve wide open, and the water is discharged until

#### New Knife Grinder.

An illustration herewith shows an especially-constructed grinder for huller knives, but that will also grind planing, paper-cutting and other knives requiring an absolutely straight and true edge. Used for either wet or dry grinding.

set for any piece of work requires no further attention. When ground to the point for which the index is set, the feed ceases to act and the knife is not unduly wasted by further grinding.

Provision is made for compensating for reduction in size of wheel after long use. The arbor is of best cast steel, running



NEW COURTHOUSE AT WYTHEVILLE, VA.; FRANK P. MILBURN, ARCHITECT, COLUMBIA, S. C.

the float drops and closes the outlet. While the trap is discharging a rotating motion is imparted to the float by the outgoing water on which it rests, thereby causing the valve and the seat to be automatically reground at every operation.

The entire absence of levers, bearings, springs, etc., should recommend this trap

The frame is compact, solid on floor, and no jar is experienced when running. Working parts are protected from dust and water.

The carriage has a constantly reciprocating movement, and the wheel is fed to the knife automatically. The pinion that reciprocates the carriage is provided with

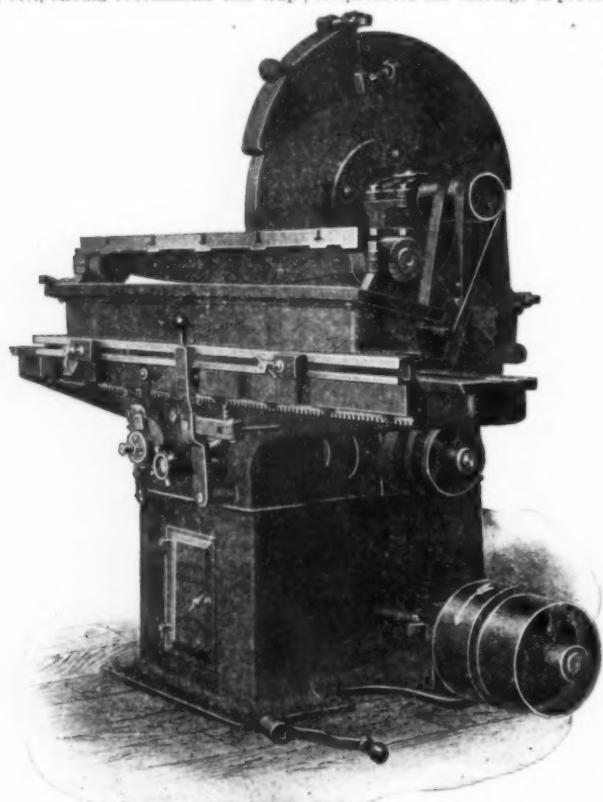
in self-oiling boxes provided with oil covers held by springs. Loose pulleys are provided with oilless bearings. A wheel of quality best suited to the work is furnished with each machine. The manufacturer of the machine is the Carver Cotton Gin Co., East Bridgewater, Mass.

#### Elevator Grille Work.

The illustration herewith is taken from a photograph of the elevator fronts recently placed upon eight floors of the Hotel Cadillac, Detroit, by the J. E. Bolles Iron and Wire Works of Detroit.

The work is highly finished, being polished

under favorable conditions. In a steam specialty this applies with great force, for failure of safety devices in that class may



NEW IMPROVED AUTOMATIC KNIFE GRINDER.

to every engineer or superintendent of a steam plant.

The trap is manufactured in all standard sizes and sold at equitable prices. The Eureka Iron Co., 9 West Randolph street, Chicago, Ill., is the manufacturer.

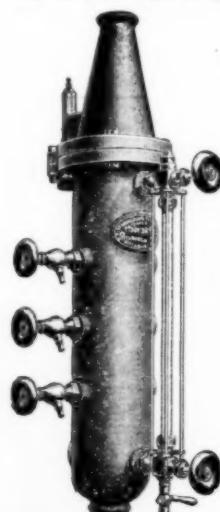
a clutch which allows of either power or hand movements of the carriage, and allows the carriage to be instantly stopped without stopping the wheel. The length of stroke is governed by adjusting stops. The feed can be set to grind as fast or fine as may be desired, and when once

lished steel electroplated. The grille work for this contract is pronounced by experts to be one of the finest in that line.

Parties who require ornamental grille work for any purpose will find it advantageous to correspond with the Bolles company.

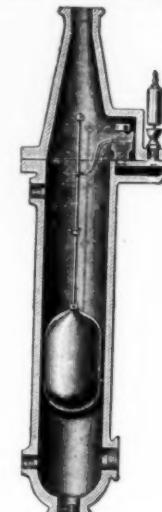
#### Safety Water Column.

The real test of a safety appliance is what it will do in emergencies, and not

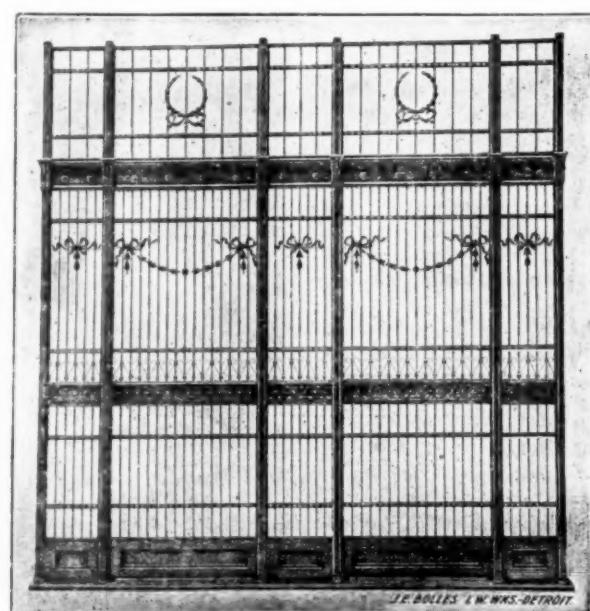


SAFETY WATER COLUMN.

under favorable conditions. In a steam specialty this applies with great force, for failure of safety devices in that class may



SECTIONAL VIEW.



ELEVATOR GRILLE WORK.

demonstrated its efficiency and reliability. It is the "Pittsburg Safety Water Column," illustrated herewith. It is simple in design, high grade in construction and accurate in operation. It invariably gives the alarm when the water in the boiler reaches high or low danger limit, its con-

struction else. The geyser protects this co-level thereby during

ing fuel shows, copper lapse, a positive burg Sa tured by Co. of 3 from w obtained

A prac embodiment illustrates rapidly as well as the poss

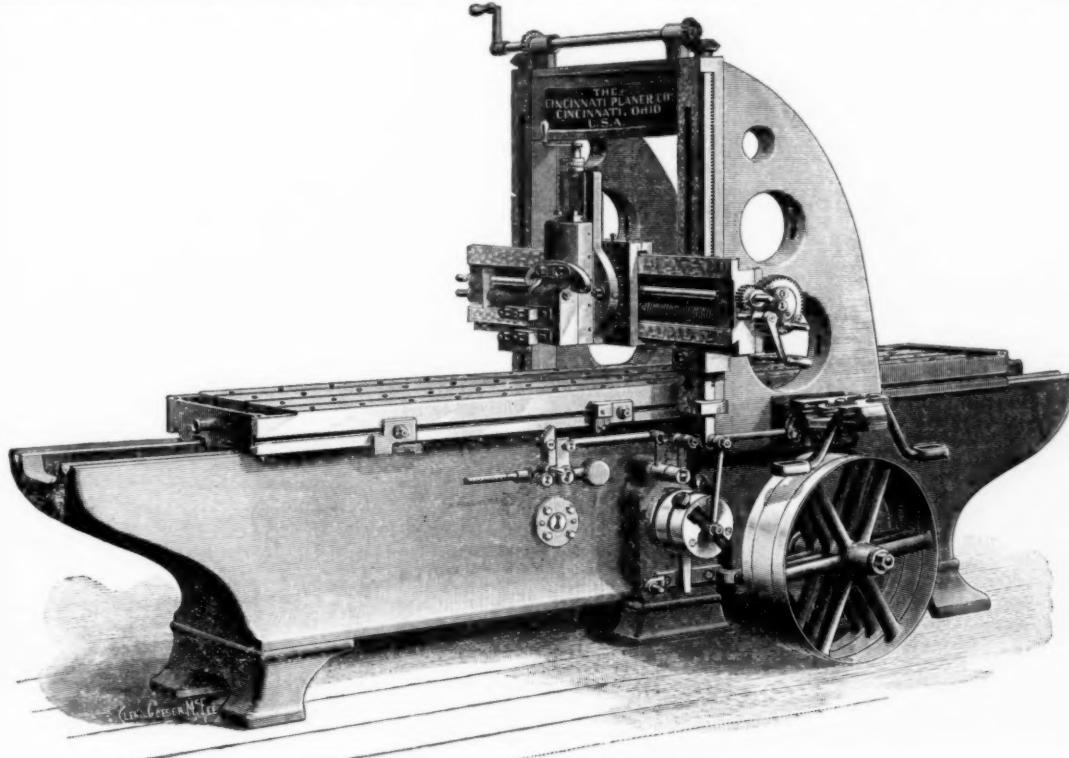
the skin "New I brush co move sh Arcade Ill., is t

Metal machine ment of in the "New C illustrate a bed of oughly girders, improved designed each end

struction not permitting it to do anything else. This deprives the boiler of its dangerous tendencies, and assures absolute protection. The water is permitted by this column to be carried at the lowest level consistent with perfect safety, thereby increasing the steam space, producing more and steadier power and saving

ing planed than the stated capacity of the machine. Holes are drilled and reamed from the solid, and T slots planed its entire length. Housings are of the improved box form, securely bolted and pinned to the bed, and are of such proportion as to insure the greatest stiffness. Cross-rail is of extra width, strengthened

engages it, thus obviating the squeaking and wearing of belts; it is also provided with a safety locking device to prevent the table from starting except at the will of operator. Shifting levers are placed on the front and rear sides of the bed, so that the machine can be controlled from either side. Driving shafts are made of

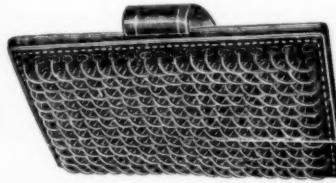


NEW 30-INCH METAL PLANER.

ing fuel. As the sectional illustration shows, the column has only one seamless copper float, which will not leak or collapse, and one frictionless valve, both positive in their operation. The "Pittsburg Safety Water Column" is manufactured by the Pittsburg Gauge & Supply Co. of 309 Water street, Pittsburg, Pa., from which further information can be obtained.

#### New Currycomb.

A practical and humane currycomb that embodies some improved features is that illustrated herewith. Its adaptability for rapidly and thoroughly currying the limbs as well as the body of animals, without the possibility of abrading or irritating



NEW CURRYCOMB.

the skin, ensures its extensive use. The "New Idea Currycomb" is comb and brush combined, and will effectually remove shedding coat, scurf and dirt. The Arcade Manufacturing Co. of Freeport, Ill., is the manufacturer.

#### New 30-Inch Metal Planer.

Metal-workers who are on the alert for machines that will tend to the improvement of their product will be interested in the accompanying reference to the "New Cincinnati 30-Inch Metal Planer" illustrated herewith. This machine has a bed of the modern deep pattern, thoroughly braced throughout by box and girders. The V's are wide and fitted with improved oiling devices. The table is so designed that the rack is extended at each end, permitting of a longer piece be-

ing an arch-shaped brace on the back. When fitted with two heads it is made of sufficient length to allow either head to have full traverse across the table, and power-elevating device is supplied. Heads are provided with power feed in all direc-

special grade of steel, of extra large diameter, and run in long boxes fitted into the bed; this construction provides the best facilities for lubrication, and makes it possible to remove any shaft with gears intact. The gearing is very powerful,

#### Tail-Rope Haulage Engine.

Mining operators particularly will be interested in the accompanying illustration of a double-drum positive-acting tail-rope engine. This machine is of the latest improved design, simple, strong and durable, built first-class in workmanship and material, with or without link motion. The drums have heavy cast-iron flanges, with barrel of heavy steel boiler-plate lagging securely riveted to flanges.

Each drum is keyed to its own shaft and revolves independently of the other, and is bolted to gear-wheel by a bolt through each arm, thereby relieving the shaft, gear and drum arms of all torsional strain.

Drums are fitted with foot-power or steam brakes, and have friction blocks bolted to drum flange or to the steel brake-band as desired.

Gears are machine-molded, massive and strong, with wide faces. The pinions carry clutch grips and have wide bearings.

The clutch is of the positive type, placed between the pinion wheels, and so adjusted as to grip either pinion or run idly between them, but can never grip both pinions at the same time, thus obviating the breakage of rope, as may happen when both gears are gripped at the same time.

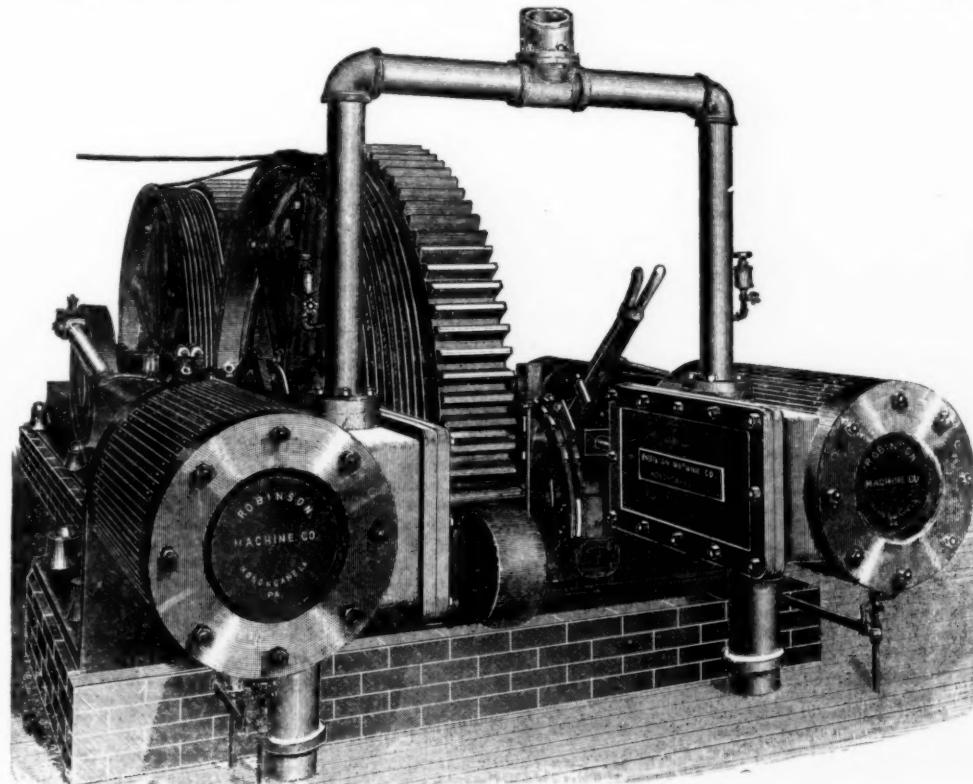
This clutch is operated by an improved screw-shifting device.

This entire machine is supported by heavy cast-iron frames set in the masonry.

All shafts are steel, and run in babbitt metal boxes.

The machine can be furnished either first motion or geared, and from 40 to 300 horse-power.

The machine illustrated was built three years ago for a West Virginia colliery, since which time four machines of same style have been constructed, each one larger than the other. The last machine installed has a pair of engines of 800



DOUBLE-DRUM POSITIVE-ACTING TAIL-ROPE ENGINE.

tions, and can be operated from either end of the cross-rail. The down-feed screw is provided with micrometer adjustment. The patent combination friction insures positive feed when heads are taking their heaviest cut. The shifter is so constructed that it removes one belt from the tight pulley before the other

and cut from solid stock; the rack is also cut from the solid, is of extra width, and bolted and pinned to the table in short sections.

This planer is made in ten sizes, ranging from twenty-four to fifty-six inches square. The builder is the Cincinnati Planer Co. of Cincinnati, Ohio.

horse-power, with a 12-foot gear and 10-foot drum, and weighs 150,000 pounds.

The Robinson Machine Co. of Monongahela, Pa., constructor of this machine, can give further particulars.

The Interstate Cotton Growers' Association met at Macon, Ga., on Tuesday.

# CONSTRUCTION DEPARTMENT.

**THE MANUFACTURERS' RECORD**  
 seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

The Globe Match Co., with capital stock of \$500,000, 171 Ascension street, Passaic, N. J., is looking for site (Maryland or Tennessee preferred) for the establishment of a match factory.

## ALABAMA.

Anniston—Iron Furnaces, Coke Ovens, etc. The Woodstock Iron Works will blow in its No. 4 furnace about January 15, and sixty days later its No. 3 furnace; company will also build 450 coke ovens, expending about \$250,000; extensive coal properties will be secured and the company reorganized under the management of Col. J. W. Woolfolk of New York.

Birmingham—Knitting Mill.—J. A. Yates & Co. have purchased knitting mill in Anniston and will remove to Birmingham, install new and additional machinery and operate same in their present building.

Birmingham—Roofing Works.—The Alabama Metal Roofing Co. has been organized, with O. E. Smith, president; Haskins Williams, vice-president, and Edward West, general manager, for the purpose of manufacturing corrugated-iron roofing and siding. Work on erection of plant has begun. Capacity will be fifteen tons of finished material per day. Address the president.

Huntsville—Knitting Mill.—It is said that a \$100,000 knitting mill will be established. The Thompson Land & Investment Co. may be addressed.

Montgomery—Cotton Compress.—The portion of Rall Bros.' compress and warehouse which was burned at a loss of \$40,500 will be rebuilt.

Sanford—Lumber Mills.—The Henderson Lumber Co. has been formed, with capital stock of \$100,000, and will erect mill for development of large tracts of timber lands near Sanford. J. D. Henderson of Andalusia, Ala., is president; John M. Garrett of Elba, Ala., secretary and treasurer, and Geo. H. Flowers of Forest, Ala., manager.

Sylacauga—Cotton Mill.—J. M. and D. L. Lewis have purchased and will operate the McDonald Cotton Mills. New machinery will be installed and 11,000 spindles operated.

Tuscaloosa—Broom and Canning Factory.—P. F. Brady contemplates establishing a broom and canning factory.

## ARKANSAS.

De Queen—Water-works.—The construction of a \$25,000 system of water-works is contemplated, as lately reported. Address Otis T. Wingo.\*

Harrison—Mining.—The Hardly Able Mining Co. has been incorporated, with capital stock of \$100,000. Oscar P. Bailey is president; Wm. Adams, vice-president; George W. Jackson, secretary, and Bertha M. Jackson, treasurer.

Little Rock—Novelty Company.—The Arkansas Novelty Co. has been chartered by S. E. Dillon, C. S. Elliott, C. C. W. Hewitt and others; capital stock \$45,000.

## FLORIDA.

Arcadia—Electric-light Plant.—The Arcadia Electric Light & Telephone Co. has been formed, franchise secured, site selected and buildings contracted for for electric-light plant. Address J. L. Jones.\*

Jacksonville—Baking powder Factory.—The Hygienic Baking Powder Co. has been formed, with Charles Davies, president, for the establishment of a baking-powder factory.

Lakeland—Ice Factory.—Riggins & Waggoner are building a large addition to their ice factory.

Pensacola—Shipbuilding Company.—The W. A. Denham Company has been incorporated to conduct general shipbuilding business, with capital stock of \$10,000, by W. A. Denham, J. E. Barrs and J. E. Dunwaddy.

St. Augustine—Oyster Cannery.—Miller & Godlin, oyster packers, of Baltimore, Md., are erecting oyster cannery at St. Augustine. Main building, nearly completed, is a one-story frame structure 60x120 feet.

Waukeechah—Cotton Mill, etc.—Gen. E. B. Bailey is making extensive improvements, including the erection of storehouse, installing cane mill, and in the near future will add cotton mill of 2000 spindles, also an axehandle factory. J. J. Rogers has contracts for several of the buildings.

Windsor—Saw-mill and Veneer Factory.—J. L. Kelley is erecting saw-mill and veneer factory, as previously reported; to be double-deck, 121x170 feet.\*

## GEORGIA.

Atlanta—Gold Dredging.—A company has been organized to dredge for gold on certain river bottoms in Georgia. Eleven miles of lenses have been secured and dredge, pumps and gold-saving apparatus purchased. Charter will be secured and work commenced in December. Edward McDowell will be in charge of operations, and organization was effected by R. E. Watson, in Austell Building.

Folsom—Flour Mill.—Lewis & Bradley will install new machinery in their flour mill.

Gainesville—Gold Mines.—Cincinnati (Ohio) parties, including George Zehler, George H. Huschart and Frank C. Grote, have made arrangements for the purchase of gold lands in Georgia, about forty miles from Gainesville, and a company will probably be formed for developing the property. The land comprises between 5000 and 10,000 acres.

Hogansville—Gold Deposits.—Gold has been discovered on the property of H. D. Brazell & Co.; owners are having it tested with prospects of developing same.

Marietta—Dairying, etc.—W. S. Wilson of Fulton county, Ed L. Wright, Sr., of Dougherty county, Loring Brown of Cobb county and others have incorporated the Belmont Farm, with capital stock of \$25,000, to conduct general dairying and farming business. Address Loring Brown at Marietta.

Rome—Fertilizer Plant.—The Virginia-Carolina Chemical Co. (principal office, Richmond, Va.) is making improvements to cost \$30,000 to its Rome plant. Capacity will be increased thirty tons per day.

Rome—Soap Factory.—A. M. Weatherby, 113 Maple street, contemplates establishing a small soap factory.\*

Savannah—Telephone System.—The Georgia Telephone & Telegraph Co. contemplates making additions to its plant, including the underground cable service.

Toccoa—Electric-light Plant, etc., and Oil Mill.—The Toccoa Falls Light & Power Co. has been organized, with E. P. Simpson, president; L. A. Simpson, vice-president and secretary, for the establishment of an electric-light plant and oil mill. Company will develop the power at Toccoa Falls; capital stock \$50,000.

Tuscaloosa—Broom and Canning Factory.—P. F. Brady contemplates establishing a broom and canning factory.

Waycross—Cigar Factory.—The Gustoso Cigar Co. has been incorporated by J. S. Bailey, president; W. B. Folks, secretary, and J. E. Wadley, treasurer.

Yarbrough—Flour Mill.—Perry Yarbrough will install some new machinery and remodel his flour mill.

## KENTUCKY.

Ashland—Wire Works.—The Norton Iron Co. is erecting a plant to galvanize wire.

Lebanon—Telephone System.—The Cumberland Telephone & Telegraph Co. will acquire and operate the telephone plant at Lebanon, also the exchanges at Stanford and Nicholasville.

Lebanon—Planing Mill.—The Offutt Planing Mill, reported burned, will probably be rebuilt. Address A. Offutt.

Louisville—Foundry, etc.—D. X. Murphy & Bro. have made plans for foundry and mill building for Kentucky Wagon Manufacturing Co.

Louisville—Sewerage, etc.—The issuance of \$500,000 of bonds for sewerage and other purposes, lately reported, was authorized at the recent election. Address "The Mayor."

Louisville—Furniture Factory.—A company with W. B. Trumbo, president; E. C. Bowyer, treasurer, and J. D. Bennett, secretary, has been formed and purchased the furniture factory of the old Louisville Manufacturing Co. Capacity of the plant has been increased.

Mayfield—Pants Factory.—A company has been formed by H. S. Hale (president), R. H. Gardner, Ben Bowden, J. K. Reynolds and others for the establishment of a \$50,000 pants factory; \$30,000 has been subscribed.

Myers—Flour Mill.—Mann & Ralls contemplate installing flour mill of twenty to twenty-five barrels capacity.\*

Nicholasville—Carriage and Wagon Factory.—J. E. Denman contemplates establishing carriage and wagon factory and repair shop about January 1.

Owensboro—Water-works.—It has been decided by popular vote to issue \$200,000 of bonds for construction of the water-works lately reported; W. P. Small, mayor.

Paducah—Stemmer.—Gallagher & Co. of Liverpool, England, controlling stemmer at Henderson, Ky., will build stemmer at Paducah.

Upton—Flour Mill.—Mr. Beavers of the Upton Milling Co. will remodel mill to the sifters system; has not awarded contract for machinery.

Vine Grove—Water-works.—The city will issue \$200 of water bonds. Address "The Mayor."

West Louisville—Flour Mill.—J. A. Wood will build flour mill (lately reported) of forty barrels capacity.\*

## LOUISIANA.

Baton Rouge—Cotton Mill.—A company is being organized, with capital stock of \$125,000, for erection of cotton mill lately reported. Address Robt. A. Hart.\*

Franklin—Electric Plant, Street Paving, etc.—The city will issue \$20,000 of bonds for adding power to its electric-light plant and for street paving. Address "The Mayor."

Lake Charles—Canal Company.—The Houston River Canal Co. has increased its capital stock from \$53,000 to \$150,000.

New Orleans—Grain Elevator.—The Texas & Pacific Railway will award contract for a 1,000,000-bushel elevator, to be operated in conjunction with its present elevator at Westwego; company will also extend its wharf space about 3000 feet. Address L. S. Thorne, general manager, Dallas, Texas.

New Orleans—Oil Mill.—It is reported that plans are being drawn for the erection of a plant with capacity of 50,000 gallons of linseed oil per day, to be made from degumming cottonseed oil by a process invented by Prof. Frederick A. Thomas.

New Orleans—Canal.—The Lake Borgne Canal Co. has awarded, as reported recently, the contracts for construction of its canal, including four large steel-lock gates; Edw. Nathan, secretary, Room 5, Cotton Exchange Building.

Shreveport—Brewery.—It is reported that Hugh Hamilton, president of the Houston Ice & Brewery Co. of Houston, Texas, will build a brewery in Shreveport.

Shreveport—Furniture Factory.—R. G. Morrow and J. W. C. Wright, president and manager of the New Orleans (La.) Furniture Manufacturing Co., propose to erect the \$40,

000 furniture factory in Shreveport lately reported. It will include two two-story frame buildings.

## MARYLAND.

Baltimore—Ice Factory.—The Carroll Manufacturing Co. will rebuild its plant burned several months ago. Contract for the building, which will be 51x120 feet and cost \$2700, has been awarded to J. Coulson.

Hagerstown—Ice Plant.—The Hagerstown Brewing Co. will build a 50-ton ice plant.

Hagerstown—Match Factory.—Lewis H. Veibel and H. C. Shepp have formed company and will establish a match factory with capacity of 250 gross per day; building has been secured and machinery will be installed. Address Lewis H. Veibel.

Havre de Grace—Carbonizer Factory.—A company has been incorporated, with capital stock of \$1,000,000, for the manufacture of carbonizers patented by J. Geo. Gardner; machine is to utilize sawdust in making wood alcohol, acid, etc.; company will build about 2000 machines and operate them.

Love Point—Wharves.—The Queen Anne's Railroad Co., William H. Bosley, president, Baltimore, has purchased 200 acres of land, and will construct wharves at Love Point.

Salisbury—Ice Plant.—The ice plant lately reported to be established by the Crystal Ice Co. will have capacity of fifteen tons; cold-storage will also be installed, with capacity for 800 tons. Contract for machinery awarded; J. D. Price, manager.

Washington, D. C.—Pumping Station.—Henry Brauns of Baltimore is preparing the working drawings for the proposed \$500,000 pumping station at Washington, lately reported. For full particulars address L. H. Beach, District commissioner.

Washington, D. C.—Peanut Company.—The Harris Peanut Product Co. has organized to prepare salted peanuts; capital \$4000; incorporators, Edward A. Oldham, Walter H. Harris, C. B. Goshorn and others.\*

## MISSISSIPPI.

Jackson—Fertilizer Factory and Acid-Phosphate Plant.—The Jackson Fertilizer Co. will build new fertilizer factory and an acid-phosphate plant; A. A. Green, manager.\*

Laurel—Electric-light Plant.—The Laurel Light & Power Co. has been organized, with capital stock of \$10,000, and privilege of increasing to \$50,000, for establishment of the electric-light plant recently noted to be built by F. W. Pettibone. Among the incorporators are F. W. Pettibone, Frank Gardner, Andrew Flanagan and Ed. D. Peirce.

Magee—Oil Mill and Ginnery.—The Magee Cotton Oil Co., reported lately as incorporated, will establish small oil mill and ginnery to have output of twelve tons. Address S. S. Donald.\*

Port Gibson—Ice Factory.—The Citizens' Ice & Manufacturing Co. has been incorporated, with capital stock of \$30,000, by O. A. Cason, G. W. Acker, S. Blomquist, J. M. Jones, J. M. Taylor and others.

Scranton—Ice Factory.—James Sumershill will build the ice factory lately reported to be established. It will be a 15-ton plant, with cold-storage attachment, and cost about \$25,000.

## MISSOURI.

Ash Grove—Lead and Zinc Mines.—Green P. Raum of Chicago, Ill., has purchased from J. P. Rice of Joplin an undeveloped tract of zinc-mining lands, comprising eighty acres, near Ash Grove.

Aurora—Lead and Zinc Mines.—The Federal Mining Co. of Boston, Mass., has purchased the Madison zinc mine and lease at Aurora for \$15,000.

Harrisonville—Telephone System.—The Quick Telephone Co. has been incorporated, with capital stock of \$20,000, by Shem Zook, Isaac Zook, Maurice Quick, P. H. Wirt and others. Address last-named.

Joplin—Zinc and Lead Mines.—Chartered: The King & Queen Mining Co., with capital stock of \$150,000, by Mary F. Robinson, B. M. Robinson of Joplin, W. F. Curtiss of Waterloo, Iowa, and others.

Joplin—Drug Company.—The Wheeler & Leffen Drug Co., with capital of \$10,000, has been chartered by Ida Wheeler, Wm. J. Leffen, Ida Leffen and others.

Kansas City—Brewery.—It is reported that A. Goertz and A. Schraubstadt of St. Louis are interested in the proposed establishment of a \$150,000 brewery in Kansas City.

St. Louis—Furniture and Carpet Company.

Chartered: The Horstbrink-Grimm Furniture & Carpet Co., with capital of \$10,000, by J. V. Grimm and others.

St. Louis—Mining.—The Zola Mining Co. has been incorporated, with capital stock of \$50,000, by Chas. E. Carroll, P. H. Noel, C. Hellingen and others.

St. Louis—Heat and Power Company.—The Chris Lodermann Heat & Power Co. has been chartered, with capital stock of \$25,000, by Chris Lodermann, C. A. Stockstrom, W. Lodermann and others.

St. Louis—Iron Company.—The St. Louis Architectural Iron Co., with capital stock of \$30,000, has been chartered by Charles A. Liman and Thomas J. Henninger.

St. Louis—Lime Company.—The Charles W. Goetz Lime Co. has been chartered, with capital stock of \$60,000, by Louise A. Goetz, Marie E. Goetz, Phillip J. Dauernheim and others.

St. Louis—Construction.—Chartered: The Jean Jameston Construction Co., with capital stock of \$10,000, by Jean Jameston, Carline Jameston and Dorsey A. Jamison.

St. Louis—Iron Works.—The St. Louis Architectural Iron Co., reported recently as incorporated, has its works in operation; Geo. H. Simon, secretary.

St. Louis—Lead and Zinc Mines.—The Silver Wedge Mining & Milling Co. has been incorporated, with capital stock of \$50,000, by James E. Clark, Daniel Evans, William T. Mason and others.

West Plains—Water-works and Electric-light Plant.—The city will construct water-works and electric-light plant. Geo. H. Cobb, city clerk, may be addressed.\*

Willard—Flour Mill.—L. D. Burdett has purchased roller flour mill at Charity and will move same to Willard, where he will install new machinery and remodel mill.

#### NORTH CAROLINA.

Concord—Cotton Mill.—The Odell Manufacturing Co. will erect another story to its building and install additional machinery.

Durham—Gas Plant.—A. M. Sutherland, C. N. McAdoo and associates have received franchise for constructing and maintaining gas plant for light, heat and power purposes.

Greensboro—Woodworking Factory.—J. G. Foushee, G. A. Smith and J. H. Whitt have purchased the Greensboro Spoke and Bending Works, and will enlarge same, making spokes, handles, rims, picker-sticks, etc., and operate as Foushee, Smith & Co.

Liberty—Flour Mill.—A. E. Lewis, Filmore Pickett and others will build flour mill.\*

Moffitt—Flour Mill.—Dr. R. L. Caveness of Coldridge has purchased and will remodel the Richland Roller Mills at Moffitt. New water-wheels will also be installed.

Morganton—Saw-mill and Flour Mill.—Andy Wortman has purchased the roller flour mill on Hunting creek, and will add saw-mill for manufacture of beehives, washboards, etc.

New Berne—Lumber Company.—Chartered: The Elm City Lumber Co., with capital stock of \$15,000.

Raleigh—Mining, Brick Works, etc.—J. C. Currie, John Blue, Henry Page and others have incorporated the Jackson Springs Co. for mining purposes, manufacture of brick and to conduct hotel; capital stock \$23,000.

Raleigh—Hosiery Mill.—The Raleigh Hosiery Co. is building new mill, as lately reported, to be three stories, of brick, 100x40 feet, boiler and engine room 45x30 feet; will have 10,000-gallon water tank, supplied from artesian well; will install 180-light dynamo, 30-horse-power boiler, dye plant, etc.; capacity will be increased to 450 dozen pairs of hosiery per day.

Roanoke Rapids—Mercantile.—Chartered: The Patterson Store Co., with capital stock of \$10,000, by S. F. Patterson and others.

Shelby—Electric-light Plant.—R. B. Miller is president; H. D. Wilson, secretary and treasurer; J. E. Duval, electrical engineer, and W. H. Miller, vice-president of the Shelby Light & Power Co., reported several weeks ago.

Stanley—Telephone Company.—The Gaston Telephone Co. has been incorporated, with capital stock of \$10,000, by M. C. Hunter, E. L. Pegram, Jr., and C. D. Homesley.

Waynesville—Abrasives Plant.—The National Abrasive Manufacturing Co., Col. S. A. Jones, general manager, is installing new machinery. Company's principal office is in New York.

Weldon—Spinning Mill.—The Weldon Cotton Manufacturing Co., reported several months ago to erect additional building and install 2000 spindles for manufacture of yarns, has awarded contract for erection of the building to W. O. Burton.

Wiesner—Flour Mill.—Oat Gather will erect a 50-barrel flour mill.\*

#### SOUTH CAROLINA.

Aiken—Hardware Company.—The Powell Hardware Co., with capital stock of \$25,000, has been incorporated by Robert and James Powell.

Charleston—Telephone System.—Cecil G. Fennell of New York, R. F. Fennell of Jackson, Mich., and Malcolm G. Duncan of Charleston have incorporated the Island Telephone Co., with capital of \$4000, for the purpose of establishing a system of toll lines seventy-five miles in length. Address M. G. Duncan.

Cheraw—Planing Mill.—H. M. Thearain of Charlotte, N. C., and others will establish a planing mill at Cheraw.\*

Inman—Cotton Mill.—A cotton mill with \$200,000 capital will be established. Jas. A. Chapman of Spartanburg will be president and treasurer.

Jonesville—Copper Mine.—W. T. Littlejohn has discovered copper on his property, and will probably develop.

Killian—Telephone System.—A telephone line has been constructed between Killian and Columbia, and the extension of the line to connect with Winnsboro, Chester and Charlotte is contemplated by the Carolina Fire-Brick Works.

Landsford—Water-power Development.—The Landsford Power Co., Leroy Springs of Lancaster, president, will be reorganized, with ample capital for developing 10,000 horse-power at Landsford, on the Catawba river. This power will be developed for distribution electrically to several cities for lighting and manufacturing purposes. Manufacturing developments are in contemplation for the utilization of all the power.

Spartanburg—Gas and Electric Plant.—The Spartanburg Street Railway, Gas & Electric Co. has been incorporated, with capital stock of \$400,000, by F. H. Knox, J. C. Norcross and T. C. Steedman.

Union—Furniture Factory.—A company has been formed, with capital stock of \$7000, for manufacturing furniture. Daniel Wallace is president.

#### TENNESSEE.

Ashwood—Flour Mill.—The Star Milling Co. has been formed for the erection of a 100-barrel flour mill; will also build grain elevator.\*

Belvidere—Flour Mill.—Robt. Eichenberger and John Warmbrod will build flour mill; contract for machinery not awarded.

Bristol—Lime and Stone Company.—The Bristol Lime & Stone Co. has been incorporated, with capital stock of \$25,000, by S. H. Golf, Samuel Brunner, J. L. Slaughter and others.

Bristol—Light and Power Plant.—The Bristol Light & Power Co., reported lately as incorporated, will build large electric-power plant for operating street cars and for other purposes.

Brownsville—Furniture Factory.—William and Robert Morris have awarded contract for erection of a furniture factory. Machinery has been contracted for.

Brownsville—Brick Works.—John W. McLeish has established works with capacity of 20,000 bricks.

Brownsville—Saw-mill.—P. C. Hickle & Co. are erecting large saw-mill.

Brownsville—Ice Factory.—Burt Smith & Co. are enlarging their ice factory.

Cedar Hill—Flour Mill.—Knight & Fiser will build 40-barrel flour mill.\*

Chattanooga—Refining Plant.—The Truxell & Hensell Asphaltum Co., reported recently to develop asphaltum deposits in Kentucky, will erect large plant in Chattanooga for refining and preparing the crude article. Benj. S. Truxell can be addressed.

Chattanooga—Machine Works.—G. W. Wheland has awarded contract for erection of a large addition to his machine works.

Chattanooga—Box Factory and Electric-light Plant.—The Consigners' Favorite Box Co. is the name of the company reported recently as being organized for the manufacture of a patent box; plant will have capacity of 4000 boxes per day and an electric-light plant will be installed for lighting buildings.

Louis Remelin is president; John G. Roth, vice-president, and Chas. E. Roth, treasurer. Address Box 239.\*

Chattanooga—Soap Factory.—Scholze Bros. have awarded contract for erection of a three-story brick and stone soap factory to cost \$23,000.

Cleveland—Woolen Mills.—The Cleveland Woolen Mills will add more floor space to its mill.

Crossville—Electric-light Plant.—The citizens will form a \$100 company for establishment of an electric-light plant. Address O. W. Moore.

Elm Tree—Flour Mill.—Jim Williams contemplates installing a 75-barrel water-power roller mill; machinery not contracted for.

Knoxville—Foundry and Machine Shop.—The Enterprise Machine Co., lately reported to rebuild burned plant, has awarded contract for erection of buildings to the Garland Brick Co.; foundry will be one-story brick, 70x80 feet; boiler and engine house one-story, 20x30 feet, and blacksmith shop 30x40 feet; cost \$500.

Knoxville—Paper-box Factory.—The Knoxville Paper Box Manufacturing Co. will double capacity of its factory by the installation of additional machinery to cost over \$5000; electric-power will also be installed; capacity will be 5000 boxes per day.

Knoxville—Furniture Factory.—Sterchi Bros., the Vance Furniture Co. and the Smith Furniture Co. of Knoxville and John W. Godley of Newcomb, Tenn., will organize a \$20,000 company for the establishment of a furniture factory in Knoxville.

Nashville—Lumber Company.—Francis Lilly, R. G. Harrison, F. E. Turrell, L. B. McFarland and L. M. Neblett have incorporated the Michigan Lumber Co., with capital stock of \$700,000, for the manufacture of lumber, operating one or more mills.

Nashville—Grain Elevator.—Capt. T. G. Ryman will build a six-story grain elevator to cost \$15,000.

Nashville—Cigar and Tobacco Factory.—The Carson Manufacturing Co., reported lately as incorporated, has organized for manufacturing tobacco and cigars at 17-19 First street.\*

Perry County—Saw-mill.—M. C. McCorkle & Sons, Big Stone Gap, Va., have purchased 4200 acres of timber in Perry county, Tennessee, and will build band-saw mill.\*

Petros—Coal Mines, etc.—The Crooked Fork Coal & Coke Co. has increased its capacity by installing new equipment, which includes entries, rails and rope, mine cars, enlargement of track facilities, etc.; has also installed new scales, enlarged commissary building and is erecting a number of miners' dwellings.

Seawee—Saw-mill.—Mrs. Harry Parker of Tullahoma, Tenn., is building a band-saw mill, with daily capacity of 20,000 feet, at Seawee.

#### TEXAS.

Aldridge—Mill and Elevator.—Chartered: The Aldridge Milling & Elevator Co., with capital stock of \$25,000.

Aldridge—Mill and Elevator.—S. W. Aldridge, J. J. Reed, J. S. Griffin and others are incorporators of the Aldridge Mill & Elevator Co., lately reported.

Alvin—Brick Works.—Azel Pierce of Camden, Ohio, and Geo. P. Buell of Houston, Texas, are investigating with a view of establishing brick works at Alvin.

Amarillo—Hardware Company.—R. L. Stringfellow, H. E. Hume and H. B. Jones have incorporated the Stringfellow House Hardware Co., with capital stock of \$100,000.

Beaumont—Plumbing.—Chartered: The Perkins Plumbing & Supply Co., with capital stock of \$5000, by B. C. Perkins of Beaumont, G. C. Perkins and W. Y. Fuqua of Beaumont.

Bonham—Ice Factory.—The Durant Ice & Cold Storage Co. of Bonham, Texas, and Durant, I. T., has been chartered, with capital stock of \$10,000, by Ed. D. Stever, C. L. Bradford, B. R. Stevens and others.

Bonham—Light and Power.—Chartered: The Durant Light & Power Co. of Bonham, Texas, and Durant, I. T., with capital stock of \$10,000, by Zac Smith, Richard B. Semple, Mack Watson and others.

Corsicana—Mica Deposits.—Mica has been discovered on property of J. E. Whitesell, and may be developed.

Corsicana—Oil Wells.—Reed Alexander has awarded contract to P. M. Lea for drilling ten oil wells.

El Paso—Shirt and Overall Factory.—The Bargman Shirt Co. has been chartered, with capital stock of \$10,000, for the manufacture of shirts and overalls, by J. Spier, J. W. Bates, L. Chernin and others.

Gonzales—Street Improvements.—The city will hold an election December 6 to decide the issuance of \$30,000 of bonds for street improvements.

Houston—Oil Refinery.—The National Cotton Oil Co. will rebuild its refinery, reported burned.

Kennard (not a postoffice).—The Central Coal & Coke Co. will build lumber mill with capacity for cutting 60,000,000 feet of lumber per year. R. H. Kent, president, Kansas City, Mo., may be addressed.

La Grange—Coal Mines.—J. C. Melcher will develop lignite coal mine on his property.

Mexia—Electric-light Plant and Water-works.—W. S. Gibbs of Huntsville, Texas, is investigating with a view of establishing water-works and electric-light plant.

Mysa—Mercantile.—Chartered: The J. A. Saxton Mercantile Co., with capital stock of \$20,000, by J. A. Saxton and others.

Orange—Ice Factory.—The Orange Ice, Light & Water-Works Co. will change its ice factory from the plate to the can system.

Paris—Telephone System.—The Southern Telephone Co., with principal office at Lake Creek, has been granted franchise for constructing a system in Paris.

Rogansville—Lumber Company.—The Rogansville Lumber Co. has been incorporated, with capital stock of \$5000, by W. Travis Cooper, James H. Hooker, J. Marshall Hooker and others.

Waco—Packing-house, etc.—The Brazos Packing Co. states that it has no intention of building an ice factory, as lately reported, but will put in packing-house, with proper refrigerating machinery and cold-storage facilities, with capacity for 100 hogs and thirty beees per day.

Wells—Lumber Company.—The Arkansas Lumber Co. has been chartered, with capital stock of \$25,000, by E. H. Williamson, W. H. Holmes of Cherokee county and H. C. Williamson of De Queen, Ark.

#### VIRGINIA.

Alexandria—Laundry.—Chartered: The Frere Laundry, with capital stock of \$5000, by J. H. Ellsworth, G. F. Stone, J. M. Frere and others, all of Washington, D. C.

Bristol—Mining and Manufacturing.—The East Tennessee Mining & Manufacturing Co. has been incorporated, with capital stock of \$2,000,000, by Ethan A. Sawyers of Washington, D. C., president; William P. Hoskins of Knoxville, Tenn., secretary and treasurer; O. L. West, H. M. Hoskins and Chas. Dawes of Knoxville, Tenn., and H. G. Peters of Bristol. Company has purchased and leased 50,000 acres of coal and mineral land, and will build mills, erect furnaces, construct coke ovens, etc.

Bristol—Coal and Coke Company.—The Crane's Nest Coal & Coke Co., to conduct general coal and coke business, has been chartered by R. M. Page and D. A. Preston, both of Alexandria.

Culpeper—Mining.—J. Keeling, C. Holmes, G. D. McMorrall, L. R. Williams and others, all of Pittsburg, Pa., have incorporated the Pittsburg Mining & Milling Co., with capital stock of \$100,000.

Front Royal—Flour Mill.—The Front Royal Milling Co. has been organized, with M. J. Fulton, president; W. E. Lake, vice-president; W. F. Welley, general manager, and J. W. Welley, secretary and treasurer, for the establishment of a 100-barrel flour mill; capital stock \$15,000.\*

Glade Springs—Cement Mill.—Keene's Cement Co., with capital stock of \$50,000, to manufacture cement, etc., has been incorporated by T. Best, W. F. Dendy, P. A. Simmonds and others.

Glen Wilton—Iron Furnace.—The Princess Iron Co. (principal office Wrightsville, Pa.) has recently acquired additional ore properties and been opening the North Mountain mines; it is understood that the company proposes to construct railroad to this mine and build a second larger iron furnace; the capacity of the present stack is being increased by the addition of a hot-blast stove, now nearing completion.

Hampton—Shirtwaist Factory.—S. C. McGrath of Onancock, Va., will, it is reported, establish a shirtwaist factory in Hampton.

Luray—Water-works Extension.—The city will extend its water-works system. Address "The Mayor."

Norfolk—Transportation Company.—Flint, Eddy & Co., Limited, has been chartered to conduct general importing and exporting business and to maintain and operate steam-

ship lines; principal office is in Norfolk; capital stock \$500,000. W. B. Flint of 30 Broad street, New York, is president; Louis E. Odio, Buenos Ayres, Argentine, vice-president; William H. Stevens, 30 Broad street, New York, secretary.

**Norfolk—Telephone System.**—The People's Telephone Co. will be organized, with capital stock of \$300,000, for establishment of a telephone system. Address D. R. Creecy, who is interested.

**Pamplin City—Flour Mill.**—J. M. Leonard has purchased an interest in the Horsepen Mill, and machinery for a 25-barrel roller mill will be installed.

**Petersburg—Milling.**—The Rialto Milling Co. has been incorporated, with capital stock of \$50,000, by W. E. Poole and S. J. Williams, both of Petersburg.

**Petersburg—Saw-mill.**—The Hatfield Lumber Co., incorporated under Delaware laws, has purchased from Wm. R. McKenney of Petersburg 50,000,000 of standing timber in Dinwiddie county, and will establish large plant at Pe Witt. Machinery will be installed, including band saws, etc.

**Richmond—Tobacco Factory.**—Vaughan & Co., a new firm composed of I. N. and H. M. Vaughan, will build a tobacco factory.

**Richmond—Abattoir, etc.**—The Valentine Meat Juice Co., reported lately to enlarge its plant, has been incorporated, with capital stock of \$100,000, by M. S. and E. P. Valentine.

**Richmond—Shipbuilding Plant.**—The William R. Trigge Shipbuilding Co., reported several months ago as having increased capital stock for enlargement of its establishment, has awarded contracts for about \$75,000 worth of new equipment; the tools ordered are for complete machine shop, but do not include the entire amount to be purchased.

**South Boston—Electric-light Plant.**—The South Boston Electric Light & Power Co., with capital stock of \$200,000, has been chartered to maintain and operate electric plant by R. W. Lawson, J. J. Lawson, R. S. Burbour, J. Stebbins and others.

**Staunton—Stove Foundry.**—Michael Crickard and W. B. Sellers will establish a stove foundry and machine works.

#### WEST VIRGINIA.

**Central City—Veneer Works.**—The Central Veneer Works is installing new machinery and erecting additional buildings.

**Clarksburg.**—The Southern Pine Co. has been incorporated, with authorized capital of \$100,000, by Walter Perkins of Bluefield, W. Va., and others.

**Dego—Coal Mines.**—W. D. Boyer, E. B. Mucklen, W. M. Curry, J. E. Louis, all of Scranton, Pa., and others have incorporated the Scranton Splint Coal Co. and the Paint Creek Coal Co., each with capital stock of \$100,000.

**Fairmont—Coal Company.**—Chartered: The Hutchinson-Ehlen Coal Co., with capital stock of \$50,000, by M. L. Hutchinson, C. E. Hutchinson, T. W. Arnet, all of Fairmont, and F. Ehlen of Baltimore, Md.

**Maysville—Flour Mill.**—Jas. M. Michall will build 24-barrel flour mill.

#### BURNED.

**Farmersville, La.**—S. M. Dumas' cotton gin; loss \$800.

**Houston, Texas.**—National Cotton Oil Co.'s refinery.

**Lafayette, Ala.**—Capt. R. J. Moore's steam gin.

**Makka, Fla.**—Seth Stephens' saw-mill.

**Montgomery, Ala.**—A section of Rail Bros.' compress and storage warehouse; estimated loss \$40,500.

**Mullins, S. C.**—B. G. Smith's cotton gin; loss \$1000.

**Rome, Ga.**—Mr. Allen's mattress factory.

**Sewell, Md.**—Thomas Mosdale's cannery and warehouse.

**Toulon, Tenn.**—Mose Savage's cotton gin.

#### BUILDING NOTES.

**Athens, Ga.**—No contracts have been let for erection of new buildings for the University of Georgia, lately reported. The matter is contingent on appropriation by the legislature now in session; W. B. Hill, chancellor.

**Baltimore, Md.—Residence.**—W. Graham Bowdoin has purchased site for \$42,000 and is having plans made by Wynter & Nolting for erection of a three-story dwelling.

**Baltimore, Md.—Truckhouse.**—Sealed proposals addressed to "Board of Awards, City Hall," will be received until November 21 for erection of building to be known as No. 11

truckhouse, according to plans and specifications which may be obtained at office of E. D. Preston, Inspector of buildings. Proposals must be accompanied by certified check for \$500. Usual rights reserved.

**Baltimore, Md.—Store Building.**—Chas. E. Cassell is preparing plans for a six-story store building 60x140 feet, to cost \$45,000, for the Eutaw Furniture Co.; Jacob Gumprecht, proprietor.

**Baltimore, Md.—Bank Building.**—The Calvert Bank will erect a \$10,000 building.

**Beaumont, Texas—Warehouse.**—M. A. McKnight will build warehouse.

**Birmingham, Ala.—Bank Building.**—Chas. Wheeler & Son have made plans and will award contract January 1 for erection of a \$50,000 bank building for the Birmingham Trust & Savings Co.

**Butler, Mo.—Courthouse.**—The proposition to build a new courthouse (lately reported) was voted on, but failed to carry; S. T. Brundt, county clerk.

**Cedartown, Ga.—Hotel.**—Efforts are being made to organize a stock company for erection of a \$40,000 hotel. Address J. W. Baooz, who is interested.

**Chattanooga, Tenn.—Dwelling.**—E. M. Shelden has let contract to William Etheridge for erection of a \$5000 dwelling.

**Ellicott City, Md.—Sanitarium.**—A sanitarium to be four stories and cost \$50,000 will be erected and controlled by the Maryland Hotel Sanitarium Co. of Baltimore, Md.

**Fairmont, W. Va.—Hotel.**—B. G. Williams has let contracts for erection of a five-story hotel.

**Gaffney, S. C.—Stock Buildings.**—The Gaffney Live-Stock Co. has awarded contract for erection of its buildings to L. Baker; building proper will be 150x65 feet, stable 100x40 feet, carriage and wagon department 100x26, and the horse and mule pen 66x50 feet.

**Huntsville, Ala.—Cottages.**—The Lowe Manufacturing Co. has awarded contract to G. W. Stegall at \$16,220 for erection of thirty operatives' cottages.

**Jackson, Miss.—Opera-house.**—Contract has been awarded to W. J. McKee for erection of the proposed five-story \$50,000 opera-house.

**Key West, Fla.—Storehouses, Batteries, etc.**—C. H. McKinstry, captain, United States army, St. Augustine, Fla., will receive sealed proposals until November 30 for completing gun and mortar batteries and building concrete storehouses at Fort Taylor. Information furnished on application.

**Knoxville, Tenn.—Theater.**—Manager Fritz Staub contemplates the erection of a new four-story brick and steel theater building, with marble trimmings, 75x160 feet, to cost \$30,000.

**Lexington, Ky.—Gymnasium, etc.**—D. F. Frazee, chairman building committee A. and M. College, will receive plans until December 1 for a gymnasium and drill hall to cost \$25,000, and woman's dormitory to cost \$16,000.

**Little Rock, Ark.—Cottages.**—Mrs. Jennie Griffith has purchased site for \$350, and will build a number of cottages.

**Luray, Va.—Sanitarium.**—A sanitarium to cost \$10,000 will be built on Cave Hill. Address "The Mayor."

**Nacogdoches, Texas—Church.**—R. Shesner of Lufkin has received contract for erection of the \$3000 Episcopal church.

**New Martinsville, W. Va.—Dwelling.**—Albert Burkart will erect dwelling.

**New Orleans, La.—Library Building.**—The design of Andry & Bendermang has been accepted for library building for Tulane University.

**New Orleans, La.—Station.**—The Louisville & Nashville Railway Co. has had plans made for a two-story brick and stone station; cost of the building and steel train sheds will be about \$60,000; Geo. E. Evans, general manager, Louisville, Ky.

**Richmond, Texas—Depot.**—The Galveston, Harrisburg & San Antonio Railway will build depot at Richmond; W. G. Van Vleck, manager, Houston.

**San Antonio, Texas—Depot.**—The Southern Pacific Railway Co., C. H. Tweed, second vice-president, New York, N. Y., has had plans made for a \$50,000 depot at San Antonio; it will be a two-story brick structure.

**Washington, D. C.—Asylum.**—H. B. F. Macfarland, J. W. Ross, L. H. Beach, commissioners, Washington, D. C., will receive sealed proposals until December 4 for constructing a receiving ward at the Washington Asylum. Blank forms of proposals and specifications, together with all necessary information, can be obtained upon application at office of Inspector of buildings, and bids upon these forms only will be considered. Usual rights reserved.

**Washington, D. C.—Police Station.**—H. B.

F. Macfarland, L. H. Beach and J. W. Ross, commissioners, Washington, D. C., will receive sealed proposals until December 8 for constructing a police station on Block 10. Blank forms of proposals, specifications, together with all necessary information, may be obtained at office of Inspector of buildings, and bids upon these forms only will be considered. Usual rights reserved.

**Waynesville, N. C.—Warehouse.**—The National Abrasive Manufacturing Co., S. A. Jones, manager, will build a warehouse.

#### RAILROAD CONSTRUCTION.

##### Railways.

**Apalachia, N. C.—W. W. Baggs.**—superintendent of the Apalachian Land & Lumber Co., writes the Manufacturers' Record that the extension of the railroad controlled by this company will probably be completed within the next six weeks.

**Baltimore, Md.—The Baltimore & Havre de Grace Railway Co.** has applied for a franchise through R. P. Sword to build an electric line in Baltimore county. The Maryland Electric Co., of which Robert S. Carswell of Baltimore is president, has also applied for a franchise in the county. It proposes building a road about twenty-eight miles long.

**Berkeley, S. C.—An official of the Berkeley Railway Co.** writes the Manufacturers' Record that this line is being extended a distance of fourteen miles to Eutawville. Surveys have been completed and most of the grading work done. D. L. Risley, 211 South Tenth street, Philadelphia, Pa., is president of the company.

**Chesterfield, Md.—It is reported that the Philadelphia, Wilmington & Baltimore Railroad Co.** is considering the construction of a branch to Tolchester Beach on Chesapeake Bay. W. H. Brown, at Philadelphia, is chief engineer.

**Dunlap, Tenn.—R. A. Patton of South Pittsburg, Tenn.**—has secured the contract to construct a spur track about one mile long to coal mines near Dunlap. Work is to commence as soon as possible.

**El Paso, Texas.**—The Chamber of Commerce of El Paso is considering a proposition to aid the extension of a railroad from Southern Arizona to El Paso. (It is understood that this is the Arizona & New Mexico Railroad, recently referred to in the Manufacturers' Record, which is to be changed from narrow to standard gauge. J. Colquhoun at Clifton, Ariz., is president.)

**Fort Smith, Ark.—The city has accepted the proposition from the Fort Smith & Western Railroad Co. to build its line into the city, also to locate machine shops at Fort Smith, in consideration of a bonus of \$50,000 and land for right of way and terminals. The Fort Smith & Western is being promoted between Fort Smith and a connection with the Missouri, Kansas & Texas system, a distance of eighty miles. George Hayden of Ishpeming, Mich., is president of the company.**

**Fort Worth, Texas.—It is reported that a part of the appropriation which has been made by the St. Louis & San Francisco Railroad Co. for further extensions in Texas includes a line to Fort Worth. An extension will be twelve miles long. William H. Bosley at Baltimore is president of the railroad company, and I. W. Troxel at Queenstown, general manager.**

**Quitman, Ga.—It is announced that the South Georgia Railroad Co. has purchased the necessary rails for its 25-mile extension to Greenville, Fla., upon which work is nearly completed. It is stated that the tracklaying is to be finished as soon as possible. J. W. Oglesby at Quitman is president of the company.**

**Raleigh, N. C.—A report is current that the Norfolk & Southern Railroad Co. is interested in the Great Eastern Railway, upon which construction work has begun between Snow Hill and Fremont. Surveys are now being made to Raleigh, and it is understood that a route has also been selected to the terminus of the Norfolk & Southern at Pantego, N. C. J. H. McCleary of Suffolk, Va., is one of the principal promoters of the enterprise. The estimated length of the road is 100 miles.**

**San Angelo, Texas.**—It is stated that the Kansas City, Mexico & Orient Railroad Co. has made a contract to build its line in Texas by the way of San Angelo. A. E. Stillwell at Kansas City is president of the company.

**San Antonio, Texas.**—The Southwestern Improvement Co., which is building the extension of the Missouri, Kansas & Texas from San Marcos to San Antonio, has graded about two-thirds of the extension, which is fifty miles in length. It is expected to begin tracklaying at once, and to complete the route by May 1.

**Spartanburg, S. C.**—The Spartanburg Street Railway, Gas & Electric Co. has received a charter from the State authorities. It proposes extending the electric line in Spartanburg and suburbs. The company is capitalized at \$100,000, and includes J. H. Knox and J. R. Norcross of Spartanburg.

**St. Louis, Mo.**—It is reported that the St. Louis & San Francisco Railroad Co. has decided to expend about \$2,500,000 on extensions and improvements during the next year in the Southwest. The extensions will include the one under construction from Sapulpa to Sherman, Texas. B. F. Yeakum, at St. Louis, is president of the company.

**Suffolk, Va.**—The Suffolk & Carolina Rail-

road of the Jackson, Columbus & Northeastern Railroad Co., writes the Manufacturers' Record that the road will be nearly 110 miles in length as at present contemplated. Surveys have already been begun.

**Jackson, Miss.—William McGlo.**—has been selected as engineer for the Jackson, Columbus & Northeastern Railroad. Surveys are now in progress. Newman Cayce, at Columbus, Miss., is president of the company.

**Kansas City, Mo.—It is reported that the plan to build an electric railroad between Kansas City and St. Joseph, Mo., is being promoted by a company of which Perry A. Gibson of Erle, Pa., is at the head.**

**Lufkin, Texns.—R. H. Keith.**—president of the Eastern Texas Railroad Co., recently referred to in the Manufacturers' Record, writes that this road will be about thirty miles in length, extending from Lufkin to Kennard. Surveys are now being made and the necessary material purchased. It is to be constructed within the next three or four months. The headquarters of the company will be at Kennard, Texas. Mr. Keith is president of the Central Coal & Coke Co. of Kansas City, Mo.

**Monroe, N. C.—William Moncure of Raleigh.**—one of the directors of the Charlotte, Monroe & Columbia Railroad Co., writes the Manufacturers' Record that ten miles of this line have been surveyed, and contracts will be let for this distance at an early date. The line is to extend from Monroe to McBee, S. C., on the Seaboard Air Line.

**New Iberia, La.—The Teche Electric Co.** has secured a franchise to build an electric line in the town. This will be a portion of the line to be built along the Teche bayou from New Iberia to Morgan City, a distance of forty-five miles. One of the principal promoters is F. F. Myles of 822 Gravier street, New Orleans.

**Pine Bluff, Ark.—The Pine Bluff & Western Railroad.**—which is being extended to Sheridan, Ark., is to be built to a connection with the Little Rock & Hot Springs Western Railroad, according to the latest report. Surveys have already been completed. The extension will be twelve miles long. William H. Sawyer & Austin Lumber Co. of La Crosse, Wis., controls the Pine Bluff & Western road. W. T. Radford at Pine Bluff is chief engineer of the company.

**Queenstown, Md.—It is announced that the Queen Anne's Railroad Co.** has decided to build the extension from Queenstown to Love Point, on Kent Island, and that surveys have been completed. The extension will be twelve miles long. William H. Bosley at Baltimore is president of the railroad company, and I. W. Troxel at Queenstown, general manager.

**Quitman, Ga.—It is announced that the South Georgia Railroad Co.** has purchased the necessary rails for its 25-mile extension to Greenville, Fla., upon which work is nearly completed. It is stated that the tracklaying is to be finished as soon as possible. J. W. Oglesby at Quitman is president of the company.

**Raleigh, N. C.—A report is current that the Norfolk & Southern Railroad Co.** is interested in the Great Eastern Railway, upon which construction work has begun between Snow Hill and Fremont. Surveys are now being made to Raleigh, and it is understood that a route has also been selected to the terminus of the Norfolk & Southern at Pantego, N. C. J. H. McCleary of Suffolk, Va., is one of the principal promoters of the enterprise. The estimated length of the road is 100 miles.

**San Angelo, Texas.**—It is stated that the Kansas City, Mexico & Orient Railroad Co. has made a contract to build its line in Texas by the way of San Angelo. A. E. Stillwell at Kansas City is president of the company.

**San Antonio, Texas.**—The Southwestern Improvement Co., which is building the extension of the Missouri, Kansas & Texas from San Marcos to San Antonio, has graded about two-thirds of the extension, which is fifty miles in length. It is expected to begin tracklaying at once, and to complete the route by May 1.

**Spartanburg, S. C.**—The Spartanburg Street Railway, Gas & Electric Co. has received a charter from the State authorities. It proposes extending the electric line in Spartanburg and suburbs. The company is capitalized at \$100,000, and includes J. H. Knox and J. R. Norcross of Spartanburg.

**St. Louis, Mo.**—It is reported that the St. Louis & San Francisco Railroad Co. has decided to expend about \$2,500,000 on extensions and improvements during the next year in the Southwest. The extensions will include the one under construction from Sapulpa to Sherman, Texas. B. F. Yeakum, at St. Louis, is president of the company.

**Suffolk, Va.**—The Suffolk & Carolina Rail-

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road Co. announces that work is to begin at once upon the extension of this line to Eatonton, N. C. The extension will be seventeen miles in length. William H. Bosley at Baltimore is president of the railroad company.

Sweetwater, Texas.—It is reported that surveys are now being completed for the Kansas City, Mexico & Orient Railroad in Texas, and that this portion of the system is to be completed within three years. A. E. Stillwell, at Kansas City, is president of the Company.

Tarboro, N. C.—It is stated that the railroad under construction between Tarboro and Snow Hill, a distance of thirty miles, is about one-third completed. H. C. Bridges of Tarboro is president of the company.

Union, Mo.—H. L. Marvin, chief engineer of the St. Louis, Kansas City & Colorado Railroad Co., writes the Manufacturers' Record that the extension of forty miles now being constructed by this company is nearly completed. No arrangements for a further extension have been made.

Water Valley, Miss.—A. Farrar has been selected as engineer for the proposed railroad between Water Valley and the Mississippi river and has begun surveys.

Waycross, Ga.—The work of laying rails upon the extension of the Waycross Air Line to Fitzgerald has begun, and it is expected to complete the extension in a few weeks. George D. Wadley, at Waycross, is general manager of the company.

West Point, Miss.—The promoters of the railroad between West Point and Memphis, Tenn., will meet at West Point on November 28 with the view of organizing a company. T. C. Kimbrough is one of the promoters of the enterprise.

#### Street Railways.

Beaumont, Texas.—The promoters of the electric railroad in Beaumont have organized a company and elected John H. Kirby of Houston, Texas, president; I. D. Polk, secretary and treasurer, and M. A. Orlopp, general manager. It is expected to begin construction work upon the line during the present year.

Brunswick, Ga.—It is reported that a syndicate of Northern capitalists has made arrangements to build an electric railway in the city and suburbs.

El Paso, Texas.—Another company has been formed to build the proposed electric line in El Paso. Among those interested are J. P. Dieter and A. Solomon. This company will ask for a franchise from the city authorities at once.

Greensboro, N. C.—It is stated that two street-railway companies are endeavoring to secure franchises to build electric lines in the city and suburbs. The mayor may be addressed.

St. Augustine, Fla.—Atlanta parties have become interested in a plan to build an electric railroad in the suburbs of the city, and are in correspondence with Mayor Boyce.

#### Machinery, Proposals and Supplies Wanted

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.**

Acid-phosphate Plant.—See "Fertilizer Factory, etc."

Belting, Shafting, etc.—Knight & Fiser, Cedar Hill, Tenn., are in the market for a lot of pulleys, shafting, elevators and belts, new or second-hand.

Boiler and Engine.—Scott Bros., Alexandria, Va., are in the market for 12-horse-power double-drum, double-cylinder hoisting engine and boiler, new or second-hand.

Boiler and Engine.—R. P. Clay, Cuba, Ala., is in the market for a 25-horse-power engine and 30-horse-power boiler.

Bridge.—H. B. F. Macfarland, J. W. Ross and L. H. Beach, commissioners, Washington, D. C., will receive sealed proposals until December 1 for construction of foundation for masonry bridge across Rock creek. Blank forms of proposals, specifications and all necessary information may be obtained at office of engineer commissioner.

Bridges.—Board of park commissioners, Louisville, Ky., are asking for proposals for bridges (concrete).

Broom Machinery.—P. F. Brady, Tuscaloosa, Ala., wants catalogues of broom machinery.

Cannery Machinery.—P. F. Brady, Tuscaloosa, Ala., wants catalogues of cannery machinery.

Cornmeal Mill.—Snowville (Va.) Milling Co. wants outfit for reducing ear corn to fine meal.

Corn Mill.—See "Flour Mill."

Cotton Ginnery.—See "Oil Mill."

Cotton Mill.—Robt. A. Hart, Baton Rouge, La., wants to correspond with manufacturers of cotton-mill machinery.

Cotton Waste.—W. Schiller, Libau, Russia, is in the market for about four tons monthly of white cotton waste; wants samples and lowest prices.

Dredgeboat Outfit.—Edw. McDowell, 21 Ellis street, Atlanta, Ga., is in the market for a second-hand three-quarter or one-yard dipper dredgeboat outfit (without boiler preferred).

Drills.—S. Munn, Son & Co., New York, N. Y., want names of parties who operate diamond drills.

Electric-light Plant.—Geo. H. Cobb, city clerk, West Plains, Mo., wants bids until December 4 for construction of electric-light plant and water-works. Bids are requested for machinery, appliances and construction.

Electric-light Plant.—Consigners' Favorite Box Co., Box 239, Chattanooga, Tenn., is in the market for a 60-light plant.

Electric-light Plant.—Robt. A. Hart, Baton Rouge, La., wants prices on small electric-light plant.

Electric-light Plant.—Arcadia Electric Light & Telephone Co., J. L. Jones, Arcadia, Fla., is in the market for 60-horse-power high-speed engine, 80-horse-power boiler, 600-light alternating-current dynamo, with all interior fittings complete, transformers, and No. 6 and 8 W. P. wire.

Engine.—Virginia-Carolina Railway Co., Abingdon, Va., is in the market for a one-and-one-half-horse-power gasoline engine.

Engine.—Mann & Ralls, Myers, Ky., wants second-hand gasoline engine.

Fertilizer Factory, etc.—Jackson (Miss.) Fertilizer Co., A. A. Green, manager, wants to communicate with contractors relative to building a fertilizer factory and acid-phosphate plant.

Fire Protection.—E. L. Shuford Manufacturing Co., Hickory, N. C., invites bids on apparatus for sprinkling cotton mill.

Flour Mill.—Star Milling Co., Ashwood, Tenn., wants prices on machinery for 100-barrel flour mill.

Flour Mill.—A. E. Lewis, Liberty, N. C., wants bids on flour-mill machinery.

Flour Mill.—Jas. W. Michall, Maysville, W. Va., wants prices on machinery for 24-barrel flour mill.

Flour Mill.—Front Royal Milling Co., J. W. Welfley, secretary, Front Royal, Va., will soon award contract for a 100-barrel flour mill.

Flour Mill.—Mann & Ralls, Myers, Ky., will need stand of rolls and bolting machinery.

Flour Mill.—Oat Gather, Wiesner, N. C., wants prices on a 50-barrel flour mill.

Flour Mill.—J. A. Wood, West Louisville, Ky., will want wheat and corn machinery and steam-power for 40 barrel flour mill.

Flour-mill Machinery.—Holley & Hendrys Bros., North Fork, Tenn., want prices on machinery for cleaning wheat.

Foundry Equipment.—Lum Machinery Co., Montgomery, Ala., wants boring mill to bore car wheels thirty-six or forty inches.

Furniture Machinery.—Capital Furniture Manufacturing Co., S. J. Beauchamp, president, Little Rock, Ark., is in the market for entire equipment for furniture factory.

Gasoline Engine.—See "Engine."

Gasoline Engine.—See "Engine."

Hoisting Equipment.—See "Boiler and Engine."

Lighting Apparatus.—E. L. Shuford Manufacturing Co., Hickory, N. C., invites bids on lighting apparatus for cotton mill.

Oil Mill.—Magee Cotton Oil Co., Magee, Miss., will need machinery for 12-ton oil mill and ginnery. Address S. S. Donald.

Ore Crushers.—Room 326, Hood Building, Birmingham, Ala., wants two second-hand ore crushers, capacity 75 to 100 tons daily (rotary kind not desired).

Packing-house.—Continental Plant Co., Kirtrell, N. C., will want machinery.

Peanut Machinery.—The Harris Peanut

Product Co., Edward A. Oldham, president, Washington, D. C., wants circulars and prices of all machinery required in all peanut processes.

Piping.—A. Asher, 109 Liberty street, New York, N. Y., is in the market for a quantity of pipe, 9 to 12-inch; second-hand preferred, extra heavy, about 14-foot lengths.

Pumping Plant.—J. E. McGuire, Wharton, Texas, wants pumping plant, including engine, boiler and pump, with power and capacity to raise 350 gallons of water per minute forty feet high.

Railway Equipment.—W. W. Baggs, superintendent, Appalachia, N. C., will want to purchase ten narrow-gauge flat cars.

Railway Equipment.—M. C. McCorkle & Sons, Big Stone Gap, Va., are in the market for a second-hand logging locomotive and cars to run on wood rail, 36-inch gauge, size ten to fifteen tons.

Railway Equipment.—Chas. Syer, P. O. Box 191, Norfolk, Va., wants literature bearing on the subject of electric railroad building.

Roofing Slate.—Charles Earl Currie, Louisville, Ky., wants names of manufacturers of roofing slate.

Saw-mill.—F. P. Chaffee, 127 Clayton street, Montgomery, Ala., is in the market for machinery for splitting and bundling kindling wood.

Separating Machinery.—W. H. Morrison, Seville, Fla., wants to buy a machine to hull and separate the bean from the hulls of the velvet bean.

Sewers.—Town council of Suffolk, Va., will receive proposals until November 29 for furnishing material and constructing approximate amount sewer work: 3600 feet of 15-inch terra-cotta pipe, 1200 feet of 12-inch, 900 feet of 10-inch, 2000 feet of 8-inch, 1125 feet of 6-inch, 300 feet of 15-inch cast-iron pipe, 16 manholes, 5 flush tanks and 5 lampholes; certified check \$400; usual rights reserved; Hite, Smith & Minshall, engineers, 605 Columbia Building, Norfolk.

Soap Machinery.—A. M. Weatherby, 113 Maple street, Rome, Ga., wants information regarding machinery for manufacture of soap.

Tile Drains.—J. H. Weatherford, 43½ Madison street, Memphis, Tenn., wants information in regard to tile drains, etc.

Tobacco Machinery.—Carson Manufacturing Co., 17-19 First street, Nashville, Tenn., wants second-hand hand and power tobacco granulator of capacity from 400 to 800 pounds per day.

Water-supply System.—Hon. J. N. Boggs, ordinary, Danielsville, Ga., wants to purchase a ram to force water about a quarter of a mile; also a wooden or iron tank about 5000 gallons capacity, with iron frame.

Water-works.—See "Electric-light Plant."

Water-works.—Otis T. Wingo, De Queen, Ark., wants to correspond relative to cost of construction of \$25,000 system of water-works.

Woodworking Machinery.—J. L. Kelley, Windsor, Fla., will want nail-driving machine and automatic veneer edger and machine for cutting the panels for panel heads out of waste.

Woodworking Machinery.—H. M. Thearlin, Charlotte, N. C., wants prices on 6x16 fast-feed flooring machine, 4x10 fast-feed flooring machine, double surfer 20 or 24 inches, edger and other machines, new or second-hand.

Woodworking Machinery.—P. O. Box No. 48, Nicholasville, Ky., wants 24-inch double or single surfer, eight or nine-inch molder, self-feed rip saw, sliding resaw, automatic knife grinder, swing cut-off saw, side edger or hand-feed rip saw.

Woodworking Machinery.—R. P. Clay, Cuba, Fla., is in the market for a 14x6 planning machine, a combination machine for either flooring or surfacing, a 14x6 inside molder preferred, new or second-hand.

#### TRADE NOTES.

Ice-Plant Contract.—Contract for the erection of the new 15-ton ice factory and 800 tons capacity cold-storage plant at Salisbury, Md., has been awarded to the York (Pa.) Manufacturing Co. Complete plant will cost \$15,000.

Steel-Frame Construction.—Extensive enlargements being made to the Iroquois Iron Works of Chicago include the erection of immense coke and limestone bins, involving a large tonnage of structural steel and plates. All the steel-frame construction and plate-iron work was awarded to Wm. B. Scaife & Sons, Pittsburgh, Pa.

Sterling Company in Boston.—The Sterling Blower & Pipe Manufacturing Co. of Hart-

ford, Conn., has established a Boston (Mass.) office in the Exchange Building. This company manufactures dust-collecting and heating and ventilating systems, and is prepared to furnish plans and estimates gratis to prospective buyers. New York offices are in the Singer Building.

Cross Oil Filters.—One of the most popular products of its character is the "Cross Oil Filter," manufactured by the Burt Manufacturing Co. of Akron, Ohio. These filters are used largely by the prominent industrial concerns of American, and many of them are constantly being ordered by new customers who become acquainted with their great merit. The National Steel Co. is using twenty of the filters in its Chicago plant.

Want a Sugar Refinery?—The production of sugar has for many years been a Southern industry. The cane mills and refineries of the section are continually being added to as the industry develops and the demand for its product increases. It seldom happens that a Southern sugar refinery is offered for sale, but one such opportunity is now available. Messrs. Sabel Bros. of Jacksonville, Fla., can inform inquirers regarding this plant. Its capacity is 600 tons, and is located in Florida.

Sugar Refinery Offered.—The manufacture of sugar is one of the leading Southern industries, and it is but seldom that a plant in it is offered for sale. However, conditions sometimes arise that necessitate the offering of complete refining plants. Sabel Bros. of Jacksonville, Fla., offer a 600-ton sugar refinery for sale at a low figure. The refinery cost \$250,000 to build and equip, and is in first-class working order. Likely investors in such a property are invited to obtain further particulars.

Voorhees Enlarging.—The Voorhees Rubber Manufacturing Co. of Jersey City, N. J., has just constructed a large addition to its works, which will give a much greater manufacturing capacity and enable it to fill orders more promptly. The new building is 50x150 feet, of brick, four stories high, and is of improved modern mill construction. The building is equipped with the latest improved machinery, including new engines, hydraulic presses, etc. With this addition to its facilities the company will have double its former capacity.

Cumberland Hydraulic Cement.—An extensive new factory is now in course of construction for the Cumberland (Md.) Hydraulic Cement & Manufacturing Co. The new plant will replace that destroyed by fire last July. The equipment will be of the most modern character for the production of natural cement, and buyers are advised to obtain prices before placing their contracts. "Cumberland Hydraulic Cement" has long been known on the market as a highest-grade product, and the new plant will more than fulfill requirements of the trade.

New Manager of Viennot's.—The old-established Viennot Advertising Agency of Philadelphia will in future be conducted under the management of Jos. H. Williamson, who was for eighteen years business manager of the Manufacturers' Advertising Agency of New York. Mr. Williamson expresses his appreciation of the courtesies extended to him in the trade-paper and general advertising field in the past, and invites a continuance of favors. Viennot's home office is at 524 Walnut street, while its New York office is in the Graham Building at 127 Duane street.

British and American Navies Use It.—Among the recent correspondents of the Atlas Pipe Wrench Co., 121 Liberty street, New York, and 51 Flood Building, San Francisco, may be mentioned the British navy, showing that the "Atlas Pipe Wrench," which was practically unheard of a year ago, has now achieved an international reputation. This is only another proof that merit tells, and with the "Atlas" in use in the American navy and the British navy we may expect all others to follow, and in the near future see all contracts for pipe wrenches specified to read "Atlas Pipe Wrench or as good."

Anti-Rust Paint.—In producing "Zanzibar Anti-Rust Paint" the manufacturer has offered a meritorious article that has won its prominent position by sheer merit. The most representative firms throughout the country have adopted this paint for their uses. Among Southern companies using it may be mentioned Galveston Wharf Co., Texas Arm & Pin Co. of Beaumont, Armour Packing Co. at Houston, American Cotton Oil Co. at Houston, Atlantic Cotton Oil Co. at Sumter, S. C., Houston Packing Co. and Stonewall (Miss.) Cotton Mills. Because of the large quantity of this paint being de-

manded for Southern consumption its manufacturer, the Garfield Oil Co. of Cleveland, Ohio, has established a branch office at New Orleans.

**Modern Towing Vessels.**—The fact that profitable freights are offered along the seaboard is attracting ship-owners of the great lakes. Some new vessels are being built especially to engage in this seaboard trade, and they will be equipped with an apparatus that has been generally used on the lakes, namely, the steam towing machine built by the American Ship Windlass Co. of Providence, R. I. This machine has merits that can scarcely be realized by those not familiar with its actual operation. Vessel owners on both sides of the Atlantic are acquainted with the efficiencies of this towing machine.

**Manifold Advantages at Marietta.**—There are many ideal localities in the South where agricultural and manufacturing activities may be exercised to great advantage. And there are many localities where homeseekers have profited by locating and manufacturers have earned large dividends because of superior advantages. At Marietta, Ga., ideal conditions are claimed to exist, the surrounding country offering great inducements for farming and special fruit-raising; also for manufacturing, with the necessary transportation facilities at hand and raw materials of various kinds in abundance. The healthfulness of the region leaves nothing to be desired. Possible purchasers of homes, farms for investment, sites for factories or land for other purposes are invited to correspond with Moultrie M. Sessions.

**Standard Steam Fuel.**—Not the least of the questions that arise in the operation of steam plants is the character of fuel to be used. Coal is, of course, the fuel now generally adopted for steaming purposes, and it is by selecting a brand that tends to make the most steam that economy of operation is enhanced. The Southern mines have furnished coal of a various character for many years, and that known as "Brushy Mountain" has come to be considered as a standard steaming fuel. The Crooked Fork Coal & Coke Co. of Petros, Tenn., mines and ships this product, and recent extensive improvements to its plant have greatly increased its facilities, so that it is better prepared than ever to cater to consumers. Quotations and other information freely furnished to probable customers.

**Carborundum's Victory.**—E. G. Acheson, president of the Carborundum Company, Niagara Falls, N. Y., has received from Paris the award of "Grand Prix," accorded to his individual exhibit of the Carborundum products. A letter from Paris in the Railway and Engineering Review, referring to the award, says: "The jury must have been deeply impressed by the value of carborundum. Usually the 'Grand Prix' is only given for exhibits which, in addition to possessing great merit, are large and showy or impressive. This can hardly be said of that of E. G. Acheson, who has been awarded the highest prize. Novelty, combined with genuine scientific and economic importance, were evidently attributed to 'Carborundum,' as this remarkable abrasive material is called. As the other grand prizes in the machinery department all went to large corporations of already international fame, this one to an individual is all the more remarkable."

**Ventilating and Heating.**—"Twenty-five Hundred Witnesses" is the suggestive title of a 56 page production of the B. F. Sturtevant Co., Boston. It is "A List of Buildings and Sundry Steamships Wherein the Sturtevant System or Apparatus Has Been Installed for the Purposes of Ventilation and Heating." The introduction contains this statement: "Some evidence is usually demanded by the prospective purchaser as to the extent and success of the application of the article or system under consideration. Printed testimonials, no matter what their titer, are always more or less questionable as to their character. But a comprehensive list of purchasers and users, to each and every one of whom the inquirer is at perfect liberty to apply for information, forcibly presents, by its very numbers, the most indisputable evidence of widespread adoption, and provides the best possible opportunity for searching inquiry as to success. Such is the list which follows. These names are the most emphatic, and, in fact, the only witnesses that this company desires to present as evidence of the successful operation of the 'Sturtevant System' and apparatus."

The National Hardware Association began its annual convention at Richmond, Va., on Wednesday.

## FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

### New Corporations.

The Texas Farmers' Mutual Insurance Co. has been organized at Fort Worth by A. E. Lyster and others.

A national bank is being organized at Lampasas, Texas, by A. Brandenburg of Caldwell, Texas, and others.

The San Antonio Loan & Trust Co., recently formed at San Antonio, Texas, has secured offices, and is now ready for business.

The American National Bank will succeed the Tennessee Valley Bank of Dayton, Tenn. It is to be capitalized at \$25,000.

It is reported that R. D. Moseley will be elected president, and P. P. Pickard, cashier, of the bank organized at Clarksville, Tenn.

The First National Bank, being organized at Moundsville, W. Va., is to be capitalized at \$50,000. Among the promoters are L. P. Martin and W. S. Brady.

George H. Hamilton and others are interested in the Calhoun County Bank of Grantsville, W. Va., which has been organized, with a capital stock of \$25,000.

Peter Winston has been elected president, and A. G. Chapman, cashier, of the First National Bank, recently organized at Farmville, Va. It is capitalized at \$30,000.

The Bank of Waverly is being organized at the town of this name in Virginia, with P. Fleetwood as president and R. D. Norris, vice-president. It is capitalized at \$25,000.

The officials of the Woodruff County Bank, recently organized at Augusta, Ark., include E. H. Connor, president, and T. E. Gegner, secretary and treasurer. The bank is capitalized at \$25,000.

L. E. Robinson has been elected president; J. M. Morris, vice-president, and J. M. Neelis, cashier, of the bank recently organized at Welsh, La. It is to be called the First National Bank of Welsh, and will be capitalized at \$25,000.

It is announced that nearly all of the capital stock of the Calvert Bank, being organized in Baltimore, has been subscribed. Among those interested is William C. Page of Baltimore, who will probably be president of the institution.

### New Securities.

The Bank of Laurel, Miss., has decided to increase its capital stock from \$20,000 to \$60,000.

The issue of \$12,000 in 4 per cent. bonds of the city of Fredericksburg, Va., has been sold to local investors at a premium.

The town of Vine Grove, Ky., will issue \$2000 in bonds for improvements. The town clerk will give further information.

The proposed issue of \$50,000 in 4 per cent. bonds of the city of Vicksburg, Miss., has been authorized. The mayor may be addressed.

Bids will be opened on December 14 for the issue of \$135,000 in bonds of the city of Greensboro, N. C. The mayor will give further information.

Bids will be received until December 6 for an issue of \$250,000 in 4 per cent. bonds of Memphis, Tenn. W. T. Armour, city secretary, may be addressed.

An issue of \$20,000 in 4 1/2 per cent. bonds of Gainesville, Ga., has been sold to Rudolph Kleybolt & Co. of Cincinnati, Ohio, at a premium of 1 per cent.

The issue of \$115,000 in bonds of Beaumont, Texas, recently placed on the mar-

ket, was sold to N. W. Harris & Co. of Chicago at a premium of \$11,165.

The town of Owensboro, Ky., has voted in favor of issuing \$200,000 in 4 per cent. bonds for water-works purposes. The mayor may be addressed.

Harris county, Texas, it is stated, will make an issue of bonds for improvements in the near future. The board of commissioners may be addressed at Houston, Texas.

The State authorities have approved an issue of \$9000 in improvement bonds of Dimmitt county, Texas. The board of commissioners may be addressed at Carizo Springs, Texas.

The city of Louisville, Ky., has voted in favor of the proposed issue of \$500,000 in improvement bonds, which has been agitated for some time past. The mayor will give further information.

At the recent election the city of Nashville, Tenn., voted in favor of issuing \$150,000 in bonds for an electric-light plant; also in favor of an issue for a viaduct. The mayor may be addressed.

The Cherry Hill, Elkton & Chesapeake City Electric Railway Co. has decided to issue \$150,000 in bonds to build its proposed line. The bonds will bear interest at 5 per cent., and it is reported that the Continental Trust Co. of Philadelphia will be trustee.

At the annual meeting of the Spartan Mills of Spartanburg, S. C., this week a semi-annual dividend of 5 per cent. was declared. The Whitney (S. C.) Manufacturing Co. also declared a semi-annual dividend of 3 per cent.

### SOUTHERN COTTON-MILL STOCKS.

#### Quotations Furnished by Hugh MacBae & Co., Wilmington, N. C., for Week Ending November 20.

	Bld.	Asked.
Abbeville Cotton Mills (S. C.)	96	101
Aiken Mfg. Co. (S. C.)	95	98
American Spinning Co. (S. C.)	100	111
Anderson Cotton Mills (S. C.)	130	150
Arcade Cotton Mills (S. C.)	100	101 1/2
Arkwright Mills (S. C.)	122	126
Augusta Factory (Ga.)	82 1/2	88
Avondale Mills (Ala.)	80	84
Belton Mills (S. C.)	104	105 1/2
Bennettsville Mfg. Co. (S. C.)	105	112 1/2
Cannon Mfg. Co. (N. C.)	181	190
Cabarrus Cotton Mills (N. C.)	148	155
Clifton Mfg. Co. (S. C.)	180	190
Courtenay Mfg. Co. (S. C.)	117	120
Darlington Mfg. Co. (S. C.)	95	99
Delgado Mills (N. C.)	100	102 1/2
Delgate & Phenix Mills (Ga.)	104	107
Edna Cotton Mills (N. C.)	120	125
Enoree Mfg. Co. (S. C.)	120	126
Enterprise Mfg. Co. (Ga.)	100	103 1/2
F. W. Poe Mfg. Co. (S. C.)	121	125
Gaffney Mfg. Co. (S. C.)	122 1/2	125
Granby Mills (S. C.)	100	103
Granby Mills (S. C.) 1st Pfd.	104 1/2	106
Granville Mfg. Co. (S. C.)	160	167
Greenwood Cotton Mills (S. C.)	102 1/2	104
Grendel Mills (S. C.)	101	103 1/2
Henderson Cotton Mills (N. C.)	120	125
Henrietta Mills (N. C.)	195	205
John P. King Mfg. Co. (Ga.)	100	103
Langley Mfg. Co. (S. C.)	115	120
Laurens Cotton Mills (S. C.)	140	145
Lockhart Mills (S. C.)	109	112 1/2
Louise Mills (N. C.)	123	128
Lynchburg Cotton Mills (Va.)	125	150
Lynchburg Cotton Mills (Va.) Pfd.	145	150
Manchester Cotton Mills (S. C.)	110	115
Mayo Mills (N. C.)	125	130
McColl Mfg. Co. (S. C.)	120	125
Modena Cotton Mills (N. C.)	142	145
Newberry Cotton Mills (N. C.)	115	122
Orr Mfg. Co. (S. C.)	103 1/2	106
Odell Mfg. Co. (N. C.)	119	114
Pacolet Mfg. Co. (S. C.)	250	275
Pelzer Mfg. Co. (S. C.)	122	127
Piedmont Mfg. Co. (S. C.)	175	180
Raleigh Cotton Mills (N. C.)	120	125
Richland Cotton Mills (S. C.)	99 1/2	102
Roanoke Mills (N. C.)	105	110
Sibley Mfg. Co. (Ga.)	85	88
Southern Cotton Mills (N. C.)	93	97 1/2
Spartan Mills (S. C.)	130	135
Trion Mfg. Co. (Ga.)	125	150
Tucupan Mills Co. (S. C.)	120	122 1/2
Union Cotton Mills (S. C.)	134	138
Union Cotton Mills (S. C.) Pfd.	101	104
Victor Mfg. Co. (S. C.)	109	110
Victor Cotton Mills (N. C.)	70	76
Warren Mfg. Co. (S. C.)	83	90
Warren Mfg. Co. (S. C.) Pfd.	104	107 1/2
Wilmington Cot. Mills (N. C.) Pfd.	110	115
Wisconsin Mills (N. C.)	120	126
Whitney Mfg. Co. (S. C.)	122 1/2	130

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Wants Match-Factory Site.	
Northern capital is constantly being invested in the erection of factories in the South located so as to obtain plentiful supplies of raw material, and thus minimize the cost of production. The timber tracts attract many of these industries. An important enterprise requiring timber for its conduct is now projected by a New Jersey company. It is a factory to have a daily capacity of a carload of matches. A suitable site where poplar and basswood can be obtained in quantities is now sought, and the States of Maryland and Tennessee are preferred. The Globe Match Co. of 141 Ascension street, Passaic, N. J., is the company mentioned; its capital is \$500,000.	